

分 冊

Separate Volume

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分冊番号 6 / 9

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PRIORITY DOCUMENT

340 345 350  
Ala Glu Ser Leu Gln Ala Ala Trp Tyr Pro Arg Thr Ser Leu Pro Thr  
355 360 365  
Pro Leu Arg Ala His Asp Ile Leu His Leu Val Glu Leu Ala Ala Gln  
370 375 380  
Tyr Arg Gln Gln Ala Arg His Pro Leu Ile Leu Pro Gln Glu Leu Pro  
385 390 395 400  
Cys Asp Leu Val Cys Gln Arg Leu Val Ala Thr Phe Thr Ser Ala Gln  
405 410 415  
Thr Val Trp Val Leu Val Gly Thr Val Gly Met Pro His Leu Pro Val  
420 425 430  
Thr Ala Cys Gly Leu Asp Pro Val Glu Gln Arg Gly Gly Met Lys Met  
435 440 445  
Ala Val Leu Arg Leu Leu Gln Glu Cys Leu Thr Leu His His Leu Val  
450 455 460  
Val Glu Ile Lys Gly Leu Leu Gly Leu Gln His Leu Gly Arg Asp His  
465 470 475 480  
Ser Asp Gly Ile Cys Leu Asn Val Leu Val Thr Val Ala Phe Arg Ser  
485 490 495  
Pro Gly Ile Gln Asp Glu Pro Pro Lys Val Arg Gly Glu Asn Phe Ser  
500 505 510  
Trp Trp Lys Val Met Glu Glu Asp Leu Gln Ser Gln Leu Leu Gln Arg  
515 520 525  
Leu Gln Gly Ser Ser Val Val Pro Val Asn Arg  
530 535

&lt;210&gt; 2244

&lt;211&gt; 434

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2244

Met Glu Ala Gly Ala Gly Ala Gly Ala Gly Ala Ala Gly Trp Ser Cys  
1 5 10 15  
Pro Gly Pro Gly Pro Thr Val Thr Thr Leu Gly Ser Tyr Glu Ala Ser  
20 25 30  
Glu Gly Cys Glu Arg Lys Lys Gly Gln Arg Trp Gly Ser Leu Glu Arg  
35 40 45  
Arg Gly Met Gln Ala Met Glu Gly Glu Val Leu Leu Pro Ala Leu Tyr  
50 55 60  
Glu Glu Glu Glu Glu Glu Glu Glu Glu Glu Glu Glu Val Glu Glu Glu  
65 70 75 80  
Glu Glu Gln Val Gln Lys Gly Gly Ser Val Gly Ser Leu Ser Val Asn  
85 90 95  
Lys His Arg Gly Leu Ser Leu Thr Glu Thr Glu Leu Glu Glu Leu Arg  
100 105 110  
Ala Gln Val Leu Gln Leu Val Ala Glu Leu Glu Glu Thr Arg Glu Leu  
115 120 125  
Ala Gly Gln His Glu Asp Asp Ser Leu Glu Leu Gln Gly Leu Leu Glu  
130 135 140  
Asp Glu Arg Leu Ala Ser Ala Gln Gln Ala Glu Val Phe Thr Lys Gln  
145 150 155 160  
Ile Gln Gln Leu Gln Gly Glu Leu Arg Ser Leu Arg Glu Glu Ile Ser  
165 170 175  
Leu Leu Glu His Glu Lys Glu Ser Glu Leu Lys Glu Ile Glu Gln Glu  
180 185 190  
Leu His Leu Ala Gln Ala Glu Ile Gln Ser Leu Arg Gln Ala Ala Glu

|   |     |     |
|---|-----|-----|
| 195   | 200 | 205 |
| Asp Ser Ala Thr Glu His Glu Ser Asp Ile Ala Ser Leu Gln Glu Asp |     |     |
| 210   | 215 | 220 |
| Leu Cys Arg Met Gln Asn Glu Leu Glu Asp Met Glu Arg Ile Arg Gly |     |     |
| 225   | 230 | 235 |
| Asp Tyr Glu Met Glu Ile Ala Ser Leu Arg Ala Glu Met Glu Met Lys |     |     |
| 245   | 250 | 255 |
| Ser Ser Glu Pro Ser Glu Glu Leu Gln Glu Leu Arg Glu Arg Tyr His |     |     |
| 260   | 265 | 270 |
| Phe Leu Asn Glu Glu Tyr Arg Ala Leu Gln Glu Ser Asn Ser Ser Leu |     |     |
| 275   | 280 | 285 |
| Thr Gly Gln Leu Ala Asp Leu Glu Ser Glu Arg Thr Gln Arg Ala Thr |     |     |
| 290   | 295 | 300 |
| Glu Arg Trp Leu Gln Ser Gln Thr Leu Ser Met Thr Ser Ala Glu Ser |     |     |
| 305   | 310 | 315 |
| Gln Thr Ser Glu Met Asp Phe Leu Glu Pro Asp Pro Glu Met Gln Leu |     |     |
| 325   | 330 | 335 |
| Leu Arg Gln Gln Leu Arg Asp Ala Glu Glu Gln Met His Gly Met Lys |     |     |
| 340   | 345 | 350 |
| Asn Lys Cys Gln Glu Leu Cys Cys Glu Leu Glu Glu Leu Gln His His |     |     |
| 355   | 360 | 365 |
| Arg Gln Val Ser Glu Glu Glu Gln Arg Arg Leu Gln Arg Glu Leu Lys |     |     |
| 370   | 375 | 380 |
| Cys Ala Gln Asn Glu Val Leu Arg Phe Gln Thr Ser His Ser Val Thr |     |     |
| 385   | 390 | 395 |
| Gln Ser Ser Pro Thr Pro Asn Pro Pro Ile Phe Ser Leu Pro Leu Val |     |     |
| 405   | 410 | 415 |
| Gly Leu Val Val Ile Ser Ala Leu Leu Trp Cys Trp Trp Ala Glu Thr |     |     |
| 420   | 425 | 430 |



Ser Ser

<210> 2245

<211> 361

<212> PRT

<213> Homo sapiens

<400> 2245

Met Ser Thr Ala Arg Glu Gln Pro Ile Phe Ser Thr Arg Ala His Val

1 5 10 15

Phe Gln Ile Asp Pro Ala Thr Lys Arg Asn Trp Ile Pro Ala Gly Lys

20 25 30

His Ala Leu Thr Val Ser Tyr Phe Tyr Asp Ala Thr Arg Asn Val Tyr

35 40 45

Arg Ile Ile Ser Ile Gly Gly Ala Lys Ala Ile Ile Asn Ser Thr Val

50 55 60

Thr Pro Asn Met Thr Phe Thr Lys Thr Ser Gln Lys Phe Gly Gln Trp

65 70 75 80

Ala Asp Ser Arg Ala Asn Thr Val Tyr Gly Leu Gly Phe Ala Ser Glu

85 90 95

Gln His Leu Thr Gln Phe Ala Glu Lys Phe Gln Glu Val Lys Glu Ala

100 105 110

Ala Arg Leu Ala Arg Glu Lys Ser Gln Asp Gly Gly Glu Leu Thr Ser

115 120 125

Pro Ala Leu Gly Leu Ala Ser His Gln Val Pro Pro Ser Pro Leu Val

130 135 140

Ser Ala Asn Gly Pro Gly Glu Glu Lys Leu Phe Arg Ser Gln Ser Ala

145                      150                      155                      160  
Asp Ala Pro Gly Pro Thr Glu Arg Glu Arg Leu Lys Lys Met Leu Ser  
                         165                      170                      175  
Glu Gly Ser Val Gly Glu Val Gln Trp Glu Ala Glu Phe Phe Ala Leu  
                         180                      185                      190  
Gln Asp Ser Asn Asn Lys Leu Ala Gly Ala Leu Arg Glu Ala Asn Ala  
                         195                      200                      205  
Ala Ala Ala Gln Trp Arg Gln Gln Leu Glu Ala Gln Arg Ala Glu Ala  
                         210                      215                      220  
Glu Arg Leu Arg Gln Arg Val Ala Glu Leu Glu Ala Gln Ala Ala Ser  
225                      230                      235                      240  
Glu Val Thr Pro Thr Gly Glu Lys Glu Gly Leu Gly Gln Gly Gln Ser  
                         245                      250                      255  
Leu Glu Gln Leu Glu Ala Leu Val Gln Thr Lys Asp Gln Glu Ile Gln  
                         260                      265                      270  
Thr Leu Lys Ser Gln Thr Gly Gly Pro Arg Glu Ala Leu Glu Ala Ala  
                         275                      280                      285  
Glu Arg Glu Glu Thr Gln Gln Lys Val Gln Asp Leu Glu Thr Arg Asn  
                         290                      295                      300  
Ala Glu Leu Glu His Gln Leu Arg Ala Met Glu Arg Ser Leu Glu Glu  
305                      310                      315                      320  
Ala Arg Ala Glu Arg Glu Arg Ala Arg Ala Glu Val Gly Arg Ala Ala  
                         325                      330                      335  
Gln Leu Leu Asp Val Arg Leu Phe Glu Leu Ser Glu Leu Arg Glu Gly  
                         340                      345                      350  
Leu Ala Arg Leu Ala Glu Ala Ala Pro  
                         355                      360

&lt;210&gt; 2246

&lt;211&gt; 170

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2246

Met Ala Gly Thr Leu Leu Ser Pro Pro Ser Gly Val Pro Leu Glu Arg

1 5 10 15

Leu Ile Arg Val Ala Thr Glu Arg Gly Tyr Thr Ala Gln Gly Glu Met

20 25 30

Phe Ser Val Ala Asp Met Gly Arg Leu Ala Gln Glu Val Leu Gly Cys

35 40 45

Gln Ala Lys Leu Leu Ser Gly Gly Leu Gly Gly Pro Asn Arg Asp Leu

50 55 60

Val Leu Gln His Leu Val Thr Gly His Pro Leu Leu Ile Pro Tyr Asp

65 70 75 80

Glu Asp Phe Asn His Glu Pro Cys Gln Arg Lys Gly His Lys Ala His

85 90 95

Trp Ala Gly Ser Cys Trp Val Phe Gly Leu Cys Pro Val Ser Ala Thr

100 105 110

Leu Arg Thr Leu Ser Cys Arg Ala Cys Ser Thr Gln Cys Trp Ala Arg

115 120 125

Pro Ala Asn His His Pro Cys Gln Arg Arg Ala Pro Arg Glu Leu Ser

130 135 140

Thr Cys Cys Pro Ser Arg Ala Arg Val Gly Thr Ile Ser Cys Gly Thr

145 150 155 160

Thr Thr Arg Ser Gly Arg Ala Thr Cys Ser

165 170

&lt;210&gt; 2247

&lt;211&gt; 317

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2247

Met Arg Lys Thr Ser Asn Ser Cys Ile Met Glu Asn Gly His Gln Pro

1 5 10 15

Gly Thr Gly Pro Gly Asp Gly Pro Pro Glu Ile Ala Gln Asn Phe Ser

20 25 30

Ala Pro Asp Pro Pro Arg Pro Arg Pro Val Ser Leu Ser Leu Arg Leu

35 40 45

Pro His Gln Pro Val Thr Ala Ile Thr Arg Val Ser Asp Arg Phe Ser

50 55 60

Gly Glu Thr Ser Ala Ala Ala Leu Ser Pro Met Ser Ala Ala Thr Leu

65 70 75 80

Gly Gly Leu Asn Pro Ser Pro Ser Glu Val Ile Thr Pro Trp Thr Pro

85 90 95

Ser Pro Ser Glu Lys Asn Ser Ser Phe Thr Trp Ser Val Pro Ser Ser

100 105 110

Gly Tyr Gly Ala Val Thr Ala Ser Lys His Ser Asn Ser Pro Pro Leu

115 120 125

Val Thr Pro Pro Gln Ser Pro Val Ser Pro Gln Pro Pro Ala Ile Thr

130 135 140

Gln Val His Arg Gln Gly Glu Arg Arg Arg Glu Leu Val Arg Ser Gln

145 150 155 160

Thr Leu Pro Arg Thr Ser Glu Ala Gln Ala Arg Lys Ala Leu Phe Glu

165 170 175

Lys Trp Glu Gln Glu Thr Ala Ala Gly Lys Gly Lys Gly Glu Ala Arg  
 180 185 190  
 Ala Arg Leu Lys Arg Ser Gln Ser Phe Gly Val Ala Ser Ala Ser Ser  
 195 200 205  
 Ile Lys Gln Ile Leu Leu Glu Trp Cys Arg Ser Lys Thr Leu Gly Tyr  
 210 215 220  
 Gln His Val Asp Leu Gln Asn Phe Ser Ser Ser Trp Ser Asp Gly Met  
 225 230 235 240  
 Ala Phe Cys Ala Leu Val His Ser Phe Phe Pro Asp Ala Phe Asp Tyr  
 245 250 255  
 Asn Ser Leu Ser Pro Thr Gln Arg Gln Lys Asn Phe Glu Leu Ala Phe  
 260 265 270  
 Thr Met Ala Glu Asn Leu Ala Asn Cys Glu Arg Leu Ile Glu Val Glu  
 275 280 285  
 Asp Met Met Val Met Gly Arg Lys Pro Asp Pro Met Cys Val Phe Thr  
 290 295 300  
 Tyr Val Gln Ser Leu Tyr Asn His Leu Arg Arg Phe Glu  
 305 310 315

&lt;210&gt; 2248

&lt;211&gt; 562

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2248

Met Gly Lys Asp Gln Glu Leu Leu Glu Ala Ala Arg Thr Gly Asn Val  
 1 5 10 15  
 Ala Leu Val Glu Lys Leu Leu Ser Gly Arg Lys Gly Gly Ile Leu Gly

|   |     |     |
|---|-----|-----|
| 20  | 25  | 30  |
| Gly Gly Ser Gly Pro Leu Pro Leu Ser Asn Leu Leu Ser Ile Trp Arg |     |     |
| 35  | 40  | 45  |
| Gly Pro Asn Val Asn Cys Thr Asp Ser Ser Gly Tyr Thr Ala Leu His |     |     |
| 50  | 55  | 60  |
| His Ala Ala Leu Asn Gly His Lys Asp Ile Val Leu Lys Leu Leu Gln |     |     |
| 65  | 70  | 75  |
| Tyr Glu Ala Ser Thr Asn Val Ala Asp Asn Lys Gly Tyr Phe Pro Ile |     |     |
| 85  | 90  | 95  |
| His Leu Ala Ala Trp Lys Gly Asp Val Glu Ile Val Lys Ile Leu Ile |     |     |
| 100   | 105 | 110 |
| His His Gly Pro Ser His Ser Arg Val Asn Glu Gln Asn Asn Glu Asn |     |     |
| 115   | 120 | 125 |
| Glu Thr Ala Leu His Cys Ala Ala Gln Tyr Gly His Ser Glu Val Val |     |     |
| 130   | 135 | 140 |
| Ala Val Leu Leu Glu Glu Leu Thr Asp Pro Thr Ile Arg Asn Ser Lys |     |     |
| 145   | 150 | 155 |
| Leu Glu Thr Pro Leu Asp Leu Ala Ala Leu Tyr Gly Arg Leu Arg Val |     |     |
| 165   | 170 | 175 |
| Val Lys Met Ile Ile Ser Ala His Pro Asn Leu Met Ser Cys Asn Thr |     |     |
| 180   | 185 | 190 |
| Arg Lys His Thr Pro Leu His Leu Ala Ala Arg Asn Gly His Lys Ala |     |     |
| 195   | 200 | 205 |
| Val Val Gln Val Leu Leu Glu Ala Gly Met Asp Val Ser Cys Gln Thr |     |     |
| 210   | 215 | 220 |
| Glu Lys Gly Ser Ala Leu His Glu Ala Ala Leu Phe Gly Lys Val Asp |     |     |
| 225   | 230 | 235 |
| Val Val Arg Val Leu Leu Glu Thr Glu Tyr Leu Glu Gly Val Gly Arg |     |     |
| 245   | 250 | 255 |

Ser Thr Val Pro Glu Glu Pro Val Gln Glu Asp Ala Thr Gln Glu Thr  
 260 265 270  
 His Ile Ser Ser Pro Val Glu Ser Pro Ser Gln Lys Thr Lys Ser Glu  
 275 280 285  
 Thr Val Thr Gly Glu Leu Ser Lys Leu Leu Asp Glu Ile Lys Leu Cys  
 290 295 300  
 Gln Glu Lys Asp Tyr Ser Phe Glu Asp Leu Cys His Thr Ile Ser Asp  
 305 310 315 320  
 His Tyr Leu Asp Asn Leu Ser Lys Ile Ser Glu Glu Glu Leu Gly Lys  
 325 330 335  
 Asn Gly Ser Gln Ser Val Arg Thr Ser Ser Thr Ile Asn Leu Ser Pro  
 340 345 350  
 Gly Glu Val Glu Glu Glu Asp Asp Asp Glu Asn Thr Cys Gly Pro Ser  
 355 360 365  
 Gly Leu Trp Glu Ala Leu Thr Pro Cys Asn Gly Cys Arg Asn Leu Gly  
 370 375 380  
 Phe Pro Thr Leu Ala Gln Glu Ser Tyr Pro Lys Lys Arg Asn Tyr Thr  
 385 390 395 400  
 Met Glu Ile Val Pro Ser Ala Ser Leu Asp Thr Phe Pro Ser Glu Asn  
 405 410 415  
 Glu Asn Phe Leu Cys Asp Leu Met Asp Thr Ala Val Thr Lys Lys Pro  
 420 425 430  
 Cys Ser Leu Glu Ile Ala Arg Ala Pro Ser Pro Arg Thr Asp Asn Ala  
 435 440 445  
 Ser Glu Val Ala Val Thr Thr Pro Gly Thr Ser Asn His Arg Asn Ser  
 450 455 460  
 Ser Thr Gly Pro Thr Pro Asp Cys Ser Pro Pro Ser Pro Asp Thr Ala  
 465 470 475 480  
 Leu Lys Asn Ile Val Lys Val Ile Arg Pro Gln Pro Lys Gln Arg Thr

|   |     |     |     |     |     |
|---|-----|-----|-----|-----|-----|
|   | 485 |     | 490 |     | 495 |
| Ser Ile Val Ser Ser Leu Asp Phe His Arg Met Asn His Asn Gln Glu |     |     |     |     |     |
|   | 500 |     | 505 |     | 510 |
| Tyr Phe Glu Thr Asn Thr Ser Thr Gly Cys Thr Ser Phe Thr Ala Ser |     |     |     |     |     |
|   | 515 |     | 520 |     | 525 |
| Pro Pro Ala Ser Pro Pro Thr Ser Ser Val Gly Thr Thr Glu Val Lys |     |     |     |     |     |
|   | 530 |     | 535 |     | 540 |
| Asn Glu Gly Thr Asn His Thr Asp Asp Leu Ser Arg Gln Asp Asp Asn |     |     |     |     |     |
| 545   |     | 550 |     | 555 | 560 |
| Asp Pro   |     |     |     |     |     |

&lt;210&gt; 2249

&lt;211&gt; 150

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2249

|   |    |    |    |
|---|----|----|----|
| Met Ser Arg Gly Gly Arg Gly Arg Lys Gly Gly Ser Leu Val Ile Val |    |    |    |
| 1   | 5  | 10 | 15 |
| Ala Lys Thr Pro Val Pro Ser Leu Thr Ser Ser Leu Gln Arg Pro Ser |    |    |    |
|   | 20 | 25 | 30 |
| Ser Cys Gly Ala Cys Trp Glu Thr Lys Val Gly Phe Arg Pro Leu Ala |    |    |    |
|   | 35 | 40 | 45 |
| Met Leu Ser Ser Pro Leu Leu Arg Ser Ala Pro Trp Leu Gln Gly Cys |    |    |    |
|   | 50 | 55 | 60 |
| Gly Gly Pro Gln Asn Gln Ala Glu Trp Glu Leu Glu Thr Val Ala Glu |    |    |    |
| 65  | 70 | 75 | 80 |



Gly His Pro Gly Leu Leu Gly Pro Leu Gln Pro Ser Val Ser Thr Ala  
                             85                            90                            95  
 Leu Ser Pro Ala Gln Gln Thr Ile Val Arg Ala Leu Val Phe Arg Pro  
                             100                            105                            110  
 Ser His Met Val Gly Pro Lys Arg Ala Pro Tyr Ala His Cys Leu Pro  
                             115                            120                            125  
 Asp Thr Arg Lys Asn His Val Gly Ile Gly Gly Pro Arg Ala Leu Pro  
                             130                            135                            140  
 Phe Leu His Pro Ser Ser  
                             145                            150

<210> 2250

<211> 142

<212> PRT

<213> Homo sapiens

<400> 2250

Met Ala Gly Arg Gly Arg Ala Leu Phe Pro Ala Gly Ala Leu Val Leu  
           1                            5                            10                            15  
 Gly Gln Val Ser Ala Leu Ala Val Gly Ser Asn Ser Pro Ser Gly Gln  
                             20                            25                            30  
 Ser Arg Asp Gly Ala Thr Leu Gln Asn Ala His Pro Gln Val Glu Ser  
                             35                            40                            45  
 Trp Val Pro Arg Ala Gln Thr His Pro Ala Pro Pro Gln Thr Trp Ala  
           50                            55                            60  
 Pro Phe Phe Thr Met His Ser Ser Glu Gln Pro Cys Arg Gln Thr Trp  
           65                            70                            75                            80  
 Arg Ala Ser Val Leu Ser Ser Cys Glu Gly Leu Cys Leu Gly Pro Trp

|   |    |     |    |     |    |
|---|----|-----|----|-----|----|
|   | 85 |     | 90 |     | 95 |
| Arg His Cys Gly Ala Gly Thr Gly Arg Ala Pro Ala Asn Ile Lys Gly |    |     |    |     |    |
| 100   |    | 105 |    | 110 |    |
| Val Val Ser Met Ser Met Gln Gly Cys Leu Ile Ala Val Ser Glu Phe |    |     |    |     |    |
| 115   |    | 120 |    | 125 |    |
| Pro Thr Gly Ser Cys Arg Ala Leu Trp Glu His Thr Leu Phe         |    |     |    |     |    |
| 130   |    | 135 |    | 140 |    |

&lt;210&gt; 2251

&lt;211&gt; 119

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2251

|   |     |     |    |
|---|-----|-----|----|
| Met Asp Ala Cys Thr Arg Thr Glu His Lys Leu Ser Arg Asp Ser Pro |     |     |    |
| 1   | 5   | 10  | 15 |
| Ser Asn Lys Leu Leu Tyr Ala Lys Glu Ile Ser Thr Tyr Lys Lys Met |     |     |    |
| 20  | 25  | 30  |    |
| Val Glu Asp Tyr Tyr Lys Gly Ile Arg Gln Met Val Gln Val Ser Asp |     |     |    |
| 35  | 40  | 45  |    |
| Gln Asp Met Asn Thr His Leu Ala Glu Ile Ser Arg Ala His Thr Asp |     |     |    |
| 50  | 55  | 60  |    |
| Ser Leu Asn Thr Leu Val Ala Leu His Gln Leu Tyr Gln Tyr Thr Gln |     |     |    |
| 65  | 70  | 75  | 80 |
| Lys Tyr Tyr Asp Glu Ile Ile Asn Ala Leu Glu Glu Asp Pro Ala Ala |     |     |    |
| 85  | 90  | 95  |    |
| Gln Lys Met Gln Leu Ala Phe Arg Leu Gln Gln Ile Ala Ala Ala Leu |     |     |    |
| 100   | 105 | 110 |    |

Glu Asn Lys Val Thr Asp Leu

115

<210> 2252

<211> 100

<212> PRT

<213> Homo sapiens

<400> 2252

Met Arg Arg Ala Arg Pro Lys Gly Asp Pro Leu His Ile Pro Ser His

1 5 10 15

Ala Ser Ala His Cys Ser Pro Gly Pro Ser Val Pro Pro Leu Ala Gly

20 25 30

Ala Val Ser Leu Ala Trp Glu Leu Met Ala Pro Phe Cys Val Pro Thr

35 40 45

Gly Ser Phe Arg Ala Arg Leu Arg Pro His His Tyr Arg His Pro Gly

50 55 60

Gly Thr Asp Phe Leu Leu Cys Gly Arg Leu Pro Pro Ala Val Pro Glu

65 70 75 80

Gln Glu Pro Gln Trp Leu Leu Arg Pro Trp Gly His Arg Arg Val Leu

85 90 95

Pro Ser Gly Tyr

100

<210> 2253

<211> 114

<212> PRT

<213> Homo sapiens

<400> 2253

Met Lys Thr Phe Ala Leu Phe Asn His Leu Arg Thr His Thr Glu Glu  
1 5 10 15  
Arg Ser Leu Asn Thr Trp Tyr Glu Glu Arg Pro Ser Arg Arg Asn Arg  
20 25 30  
Phe Leu Ser Ile Thr Lys Lys Phe Thr Val Glu Lys Thr Pro Ala Ser  
35 40 45  
Lys Glu Cys Gly Met Val Phe Ser His Leu Ser Tyr Val Arg Lys Leu  
50 55 60  
Tyr Lys Val Pro Met Gly Lys Arg His Tyr Lys Cys Ser Glu Asn Gly  
65 70 75 80  
Lys Ala Phe Ser Tyr Arg His Pro Leu Leu Arg Lys Ile Thr Arg Glu  
85 90 95  
Phe Thr Arg Glu Leu Trp Ala Thr Asn Val Gly Lys Pro Gln Leu Pro  
100 105 110  
Glu Ser

<210> 2254

<211> 161

<212> PRT

<213> Homo sapiens

<400> 2254

Met Val Leu Val Leu Val Leu Val Val Met Cys Trp His Val Arg Phe  
1 5 10 15

Leu Phe Ser Phe Pro Leu Leu Ser Ala Ser Thr Phe Cys Ser Leu Arg  
                     20                            25                            30  
 Leu Pro Thr Glu Tyr Glu Arg Asn Gly Arg Tyr Glu Gly Ser Ser Arg  
                     35                            40                            45  
 Asn Val Ser Ala Glu Gln Lys Asp Glu Asn Lys Glu Ala Lys Pro Arg  
                     50                            55                            60  
 Ser Leu Arg Phe Thr Trp Ser Met Lys Thr Thr Ser Ser Met Asp Pro  
                     65                            70                            75                            80  
 Gly Asp Met Met Arg Glu Ile Arg Lys Val Leu Asp Ala Asn Asn Cys  
                                     85                            90                            95  
 Asp Tyr Glu Gln Arg Glu Arg Phe Leu Leu Phe Cys Val His Gly Asp  
                     100                            105                            110  
 Gly His Ala Glu Asn Leu Val Gln Trp Glu Met Glu Val Cys Lys Leu  
                     115                            120                            125  
 Pro Arg Leu Ser Leu Asn Gly Val Arg Phe Lys Arg Ile Ser Gly Thr  
                     130                            135                            140  
 Ser Ile Ala Phe Lys Asn Ile Ala Ser Lys Ile Ala Asn Glu Leu Lys  
                     145                            150                            155                            160  
 Leu

&lt;210&gt; 2255

&lt;211&gt; 117

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2255

Met Tyr Lys Val Glu Tyr Leu Phe Thr Ser Gln Cys Ile Arg Asn Leu

1 5 10 15  
Phe Thr Gln Ala Ile Ile Leu Lys Thr Ala Leu Gln Val Val Cys Glu  
20 25 30  
Thr Phe Pro Glu Phe Ile Ser Thr Ser Ala Leu Ser Val Ala Ser Ser  
35 40 45  
Ile Pro Glu Leu Lys Lys Arg Pro Leu Pro Thr Ala Ser Asn Pro Ala  
50 55 60  
Phe Leu Val Ile Leu Leu Phe Phe Phe Asn Phe Lys Phe Trp Asp Thr  
65 70 75 80  
Cys Ala Glu His Ala Gly Leu Leu His Arg Tyr Thr Cys Ala Tyr Val  
85 90 95  
Tyr Leu Cys Asn Met Val Val Thr Val Asn Met Val Val Tyr Cys Ile  
100 105 110  
Tyr Gln Pro Val Ile  
115

&lt;210&gt; 2256

&lt;211&gt; 121

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2256

Met Met Gly Arg Gly Val Arg Trp Gly Ser Arg Ala Trp Glu Arg Met  
1 5 10 15  
Ala His Ala Leu Lys Val His Glu Arg Pro Pro Leu Pro Thr Ser Ala  
20 25 30  
Glu Thr Ser Leu Asp Thr Lys Ser Val Ser Glu Gly His Leu Lys Arg  
35 40 45

Asn Ile Val Val Lys Thr Val Glu Met Arg Asp Gly Glu Val Arg Arg  
 50 55 60  
 Asp Leu Gly Pro Val Arg Leu Trp Leu Ala Pro Gly Ile Leu Lys Ala  
 65 70 75 80  
 Arg Pro Trp Arg Lys Ala Trp Gly Trp His Ile Glu Gly Ser Gln Gln  
 85 90 95  
 Leu Pro Val Ala Pro Gln Gly Ile Leu Glu Glu Ser Lys Glu Thr Glu  
 100 105 110  
 Cys Asn Ser Val Ser Ser Val Pro Pro  
 115 120

<210> 2257

<211> 193

<212> PRT

<213> Homo sapiens

<400> 2257

Met Pro Gln Ala Glu Leu Gly Ile Gln Val Cys Thr Cys Arg Leu Arg  
 1 5 10 15  
 Gly Ser Val Ser Arg Cys Cys Ser His Arg Glu Phe Arg Arg Gln Pro  
 20 25 30  
 Ser Pro Cys Ala Ala Gly Ile Gly Leu Leu His Leu Gly Ser Thr Ala  
 35 40 45  
 Ser Arg Gln Val Lys Pro Pro Arg Leu Pro Pro Pro Trp Gly Arg  
 50 55 60  
 Ser Gly Glu Lys Leu Pro Phe Thr Pro Phe Pro Gly Cys Ser Leu Ser  
 65 70 75 80  
 Arg Trp His Ala Ser Pro Gln Thr Gln Val Ala Phe Gly Pro Arg Trp

|     |     |     |     |     |     |
|-----|-----|-----|-----|-----|-----|
|     | 85  |     | 90  |     | 95  |
| Val | Ser | Leu | Leu | Pro | Leu |
| Pro | His | Thr | Pro | Ser | Gly |
| His | Trp | Asp | Pro |     |     |
|     | 100 |     | 105 |     | 110 |
| Cys | Pro | Ser | Asp | Val | Leu |
| Gly | Ser | Arg | Ser | Gly | Ala |
| Ser | His | Cys | Gly |     |     |
|     | 115 |     | 120 |     | 125 |
| Lys | Arg | Pro | Gly | Ala | Trp |
| Pro | Glu | Arg | Gln | Pro | Arg |
| Ala | Gly | Pro | Ser |     |     |
|     | 130 |     | 135 |     | 140 |
| Pro | Glu | Ser | Trp | Ser | Arg |
| Ala | Arg | Glu | Ala | Pro | Ile |
| Pro | Pro | Arg | Pro |     |     |
|     | 145 |     | 150 |     | 155 |
| Ala | Ala | Leu | Ser | Ala | Val |
| Ser | Ser | Ile | Cys | Ser | Ser |
| Phe | His | Pro | Leu |     |     |
|     | 165 |     | 170 |     | 175 |
| Val | Gly | Pro | Pro | Ser | Pro |
| Phe | Pro | Leu | Pro | Leu | Val |
| Pro | Ser | Ala | Gly |     |     |
|     | 180 |     | 185 |     | 190 |
| Arg |     |     |     |     |     |

&lt;210&gt; 2258

&lt;211&gt; 105

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2258

|     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| Met | Val | Phe | Gly | Phe | Pro | Phe | Leu | Ser | Tyr | Phe | Thr | Glu | Asn | Asn | Gly |
| 1   |     |     |     | 5   |     |     |     |     | 10  |     |     |     |     | 15  |     |
| Leu | Gln | Leu | His | Pro | Ser | Cys | Cys | Lys | Arg | His | His | Phe | Val | Pro | Phe |
|     |     |     | 20  |     |     |     |     |     | 25  |     |     |     |     | 30  |     |
| Tyr | Gly | Cys | Val | Val | Phe | His | Gly | Val | Tyr | Thr | Ser | Arg | Phe | Leu | Tyr |
|     |     |     | 35  |     |     |     |     | 40  |     |     |     |     |     | 45  |     |



Leu Leu Ile Gly Arg Trp Ala Leu Lys Leu Ala Pro Cys Ile Cys Asn  
 50 55 60  
 Cys Glu Leu Cys Cys Cys Lys Arg Val Cys Met Cys Leu Phe His Ile  
 65 70 75 80  
 Val Thr Ser Phe Pro Leu Thr Arg Leu Gln Ile Ile Leu Arg Gly Tyr  
 85 90 95  
 Ser Tyr Gln Asn Arg Val Ala Leu Val  
 100 105

<210> 2259

<211> 171

<212> PRT

<213> Homo sapiens

<400> 2259

Met Leu Arg Val Pro Gly Ser Cys Cys Pro Cys Pro Arg Pro Cys Pro  
 1 5 10 15  
 Pro Leu Ala Leu Gln Ser Pro Thr Pro Met Pro Thr Ser Gly Ser Pro  
 20 25 30  
 Leu Gln Ala Leu Leu Leu Tyr Pro Leu Asp Gln Trp Cys Leu Ala Gly  
 35 40 45  
 Cys Ser Arg Pro Leu Leu Val Gln Pro Gln Leu Pro Lys Gly Asp Ser  
 50 55 60  
 Lys Pro Ser Leu Arg Ala Glu Asp Leu Leu Gly Asp Arg Lys Arg Leu  
 65 70 75 80  
 Gly Ser Leu Ser Gly Ala Ser Ser His Pro Cys Cys Leu Trp Ile Met  
 85 90 95  
 Pro Thr Ala Pro Ile Ser Phe Gln Glu Ala Leu Ala Gln His Lys Thr

|   |     |     |
|---|-----|-----|
| 100   | 105 | 110 |
| Gly Ser Leu Ser Phe Leu Pro Ser Ser Ser Leu Pro Pro Ser Ser Ile |     |     |
| 115   | 120 | 125 |
| Thr Arg Thr Leu Val Thr Thr Gln Asn His Trp Val Val Pro Leu His |     |     |
| 130   | 135 | 140 |
| Pro Leu Pro Val Leu Cys His Pro Pro Ser Lys Ala Pro Ala Leu Leu |     |     |
| 145   | 150 | 155 |
| Cys Pro Ser Thr Gln Gly Ser Leu His Ser Ala                     |     |     |
| 165   | 170 |     |

&lt;210&gt; 2260

&lt;211&gt; 111

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2260

|   |    |    |
|---|----|----|
| Met Arg Asp Leu Thr Arg Gly His Val Ser Ala Ser Arg Phe Ile Val |    |    |
| 1   | 5  | 10 |
| Cys Leu Gly Trp Pro Leu Glu Ala Leu Asp Leu Ile Val Pro Val Trp |    |    |
| 20  | 25 | 30 |
| Lys Phe Leu Asn Ile Glu Asn Ile Ile His Met Met Thr Phe Phe Phe |    |    |
| 35  | 40 | 45 |
| Leu Ser Glu Asp Thr Leu Ile Phe Ala Ile Ala Arg Phe Arg Asn Pro |    |    |
| 50  | 55 | 60 |
| Thr Gln Thr Gly Leu Ser Lys Glu Gly Val Tyr Cys Ser Cys Ser Trp |    |    |
| 65  | 70 | 75 |
| Glu Ala Trp Thr Gly Leu Gly Pro Gly Ala Leu Thr Ser Ser Gln Leu |    |    |
| 85  | 90 | 95 |

Gly Gln Gln Val Glu Arg Gly Leu Leu Leu Pro Ser Gly Cys His  
 100 105 110

<210> 2261

<211> 109

<212> PRT

<213> Homo sapiens

<400> 2261

Met Asn Thr Cys Ser Gln Gly Thr Leu His Asp Gln Leu Cys Phe Arg  
 1 5 10 15  
 Glu Gly Arg Ser Ser Pro Phe Lys Ala Arg Ile Pro Arg Arg Ser Val  
 20 25 30  
 His Tyr Leu Pro Ser Glu Leu Trp Ala Tyr Leu Tyr Phe Leu His Phe  
 35 40 45  
 Ser Arg Gln Glu Gly Gly Ser Ser Thr Glu Asn Pro Leu Ser Trp Val  
 50 55 60  
 Lys Glu His Ser Leu Gly Cys Leu Gly Glu Lys Ile Ser Ile Pro Arg  
 65 70 75 80  
 Ser Cys Ser Leu Gly Val Arg Trp Glu Gln Arg Arg Gln Ser Val Gly  
 85 90 95  
 Pro Leu Trp Arg Gln Gln Gly Gly Val Pro Cys Gly His  
 100 105

<210> 2262

<211> 143

<212> PRT

<213> Homo sapiens

<400> 2262

Met Arg Ala Gln Ala Asn Ser Gly Lys Phe Leu Ser Pro Arg Ala Glu  
1 5 10 15  
His Glu His Leu Glu Ala Lys Gly Ala Ala Trp Leu Leu Pro Thr Lys  
20 25 30  
Glu Thr Asp Gly Val Gln Leu Ile Pro Met Phe Leu Leu His Phe Thr  
35 40 45  
Pro Lys Phe Pro Ala Arg Ser Lys Ala Ser Pro Gly Thr Leu Val Phe  
50 55 60  
Leu Pro Lys Ala Ser Gln Gly His Pro Ala Ile Leu Met Arg Leu Pro  
65 70 75 80  
Val Pro Ser Cys Pro Ser Pro His Pro Arg Ile Asn His Gln Arg Arg  
85 90 95  
Thr Val Tyr Met Ser Ser Ser Leu Cys Leu Gly Arg Glu Thr Asn Lys  
100 105 110  
Arg Met Arg Arg Leu Gly Arg Pro Leu Ala Val Thr Ser Ser Asn Cys  
115 120 125  
Pro Cys Gln Gly Phe Met Glu Glu Glu Thr Glu Ala Ala Leu Cys  
130 135 140

<210> 2263

<211> 197

<212> PRT

<213> Homo sapiens

<400> 2263

Met Ala Leu Asn Asn Phe Leu Phe Ala Gln Cys Ala Cys Tyr Phe Leu  
 1 5 10 15  
 Ala Phe Leu Phe Ser Phe Val Val Val Val Pro Leu Ser Glu Asn Gly  
 20 25 30  
 His Asp Phe Arg Gly Arg Cys Leu Leu Phe Thr Glu Gly Met Trp Leu  
 35 40 45  
 Ser Ala Asn Leu Thr Val Gln Glu Arg Glu Arg Phe Thr Val Gln Glu  
 50 55 60  
 Trp Gly Pro Pro Ala Ala Cys Arg Phe Ser Leu Leu Ala Ser Leu Leu  
 65 70 75 80  
 Ser Leu Leu Leu Ala Ala Ala His Ala Trp Arg Thr Leu Phe Phe Leu  
 85 90 95  
 Cys Lys Gly His Glu Gly Ser Phe Phe Ser Ala Phe Leu Asn Leu Leu  
 100 105 110  
 Val Ser Ala Phe Val Val Phe Leu Val Phe Ile Ala Ser Thr Ile Val  
 115 120 125  
 Ser Val Gly Phe Thr Met Trp Cys Asp Thr Ile Thr Glu Lys Gly Thr  
 130 135 140  
 Val Pro His Ser Cys Glu Glu Leu Gln Asp Ile Asp Leu Glu Leu Gly  
 145 150 155 160  
 Val Asp Asn Ser Ala Phe Tyr Asp Gln Phe Ala Ile Ala Gln Val Gly  
 165 170 175  
 Gly Ser Gly Gln Glu Gly Arg Leu Ala Met Leu Gly Gly Gly His Leu  
 180 185 190  
 Leu Leu Asp Ile Cys  
 195

&lt;210&gt; 2264

&lt;211&gt; 108

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2264

Met Gly Asn Val Cys Ser Pro Tyr Ser Arg Cys Leu Cys Leu Thr Leu

1 5 10 15

Gly Ala Cys Pro Ala Pro Phe Gln Pro Pro Leu Pro Cys Cys Ser Pro

20 25 30

Pro Ser Ser Gly Leu Ser Thr Asp Leu Lys Ala Pro Leu Gly Gln Ile

35 40 45

Pro Pro Glu Ser Leu Ser His Pro Gln Gly Thr Gln Ala Arg Pro Ser

50 55 60

Trp Ser Ser Trp Thr Val Leu Gln Glu Ala Ala Gln Gln Arg Leu Trp

65 70 75 80

Asp Gln Gln Cys Gln Thr Thr Val Phe Thr Cys Ser Pro His Gly Val

85 90 95

Leu Met Cys Gly Trp Pro Leu Ala Ala Pro Glu Gln

100 105

&lt;210&gt; 2265

&lt;211&gt; 100

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2265

Met Asn Asn Ser Ser Leu Leu Arg Pro Ser Pro Lys Ala Gln Gly Pro

1 5 10 15

Leu Val Ser Ala Val Cys Thr Ser Ser Val Arg Arg Gln Asp Ser Arg  
                     20                    25                    30  
 Ser Met Lys Arg Ala Gly Gln Lys Thr Pro Thr Leu Ala Gly Arg His  
                     35                    40                    45  
 Val Pro Leu Lys Ile Lys Lys Glu Ala Ile Trp Glu Gln Cys Ser Ser  
                     50                    55                    60  
 Tyr Val Arg Pro Gly His Phe Leu Phe Thr Gly Asp Tyr Lys Thr Phe  
                     65                    70                    75                    80  
 Val Leu Ser Ser Leu Asp Val Asp Ala Ile Leu Gly Leu Ser Pro Pro  
                                     85                    90                    95  
 Ala Pro Arg His  
                     100

&lt;210&gt; 2266

&lt;211&gt; 169

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2266

Met Asn Ser Leu His Ala Gly Arg Gln Gln Ala Phe Gln Glu Asp Pro  
           1                    5                    10                    15  
 Gly Pro Thr Gly Leu Gly Lys Asp Thr Ser Ala Gly Arg Arg Thr Arg  
                     20                    25                    30  
 Ser Thr Glu Ala Leu Gln Ser Ala Leu Ser Ala Lys Leu Ile Gly Arg  
                     35                    40                    45  
 Gly Gly Gly Leu Pro Asn Gly Cys Thr Gly Thr Pro Thr Thr Cys His  
                     50                    55                    60  
 Leu Pro Gly Gln Tyr Leu Gly Thr Glu Leu Ser Pro Lys Ser Lys Asn

65                      70                      75                      80  
 Ile Ser Lys His Thr Val Glu Lys Trp Arg Leu Glu Val Thr Val His  
                             85                      90                      95  
 Arg Glu Pro Ala Trp Asn Leu Trp Ala Gly Thr Arg Ala Gly Gln Phe  
                             100                      105                      110  
 Gln Thr Arg Gly Ser Arg Lys Gln Thr Gln Pro Arg Pro Leu Pro Arg  
                             115                      120                      125  
 Thr His Leu Leu Pro Pro Pro Thr Pro Arg Arg Pro His Gln Glu Ser  
                             130                      135                      140  
 His Pro Trp Ala Pro Thr Met His Gln Thr Ala His Tyr Cys Arg Arg  
 145                      150                      155                      160  
 Asn Ala Thr Arg Asp Lys Pro Pro Ala  
                             165

&lt;210&gt; 2267

&lt;211&gt; 482

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2267

Met Ala Thr Gly Gly Gly Ile Arg Ala Met Thr Ser Leu Tyr Gly Gln  
     1                      5                      10                      15  
 Leu Ala Gly Leu Lys Glu Leu Gly Leu Leu Asp Cys Val Ser Tyr Ile  
                             20                      25                      30  
 Thr Gly Ala Ser Gly Ser Thr Trp Ala Leu Ala Asn Leu Tyr Glu Asp  
                             35                      40                      45  
 Pro Glu Trp Ser Gln Lys Asp Leu Ala Gly Pro Thr Glu Leu Leu Lys  
                             50                      55                      60



Thr Gln Val Thr Lys Asn Glu Leu Gly Val Leu Ala Pro Ser Gln Leu  
 65 70 75 80  
 Gln Arg Tyr Arg Gln Glu Leu Ala Glu Arg Ala Arg Leu Gly Tyr Pro  
 85 90 95  
 Ser Cys Phe Thr Asn Leu Trp Ala Pro Ile Asn Glu Ala Leu Leu His  
 100 105 110  
 Asp Glu Pro His Asp His Lys Leu Ser Asp Gln Arg Glu Ala Leu Ser  
 115 120 125  
 His Gly Gln Asn Pro Leu Pro Ile Tyr Cys Ala Leu Asn Thr Lys Gly  
 130 135 140  
 Gln Ser Leu Thr Thr Phe Glu Phe Gly Glu Trp Cys Glu Phe Ser Pro  
 145 150 155 160  
 Tyr Glu Val Gly Phe Pro Lys Tyr Gly Ala Phe Ile Pro Ser Glu Leu  
 165 170 175  
 Phe Gly Ser Glu Phe Phe Met Gly Gln Leu Met Lys Arg Leu Pro Glu  
 180 185 190  
 Ser Arg Ile Cys Phe Leu Glu Gly Ile Trp Ser Asn Leu Tyr Ala Ala  
 195 200 205  
 Asn Leu Gln Asp Ser Leu Tyr Trp Ala Ser Glu Pro Ser Gln Phe Trp  
 210 215 220  
 Asp Arg Trp Val Arg Asn Gln Ala Asn Leu Asp Lys Glu Gln Val Pro  
 225 230 235 240  
 Leu Leu Lys Ile Glu Glu Pro Pro Ser Thr Ala Gly Arg Ile Ala Glu  
 245 250 255  
 Phe Phe Thr Asp Leu Leu Thr Trp Arg Pro Leu Ala Gln Ala Thr His  
 260 265 270  
 Asn Phe Leu Arg Gly Leu His Phe His Lys Asp Tyr Phe Gln His Pro  
 275 280 285  
 His Phe Ser Thr Trp Lys Ala Thr Thr Leu Asp Gly Leu Pro Asn Gln

|   |     |     |
|---|-----|-----|
| 290   | 295 | 300 |
| Leu Thr Pro Ser Glu Pro His Leu Cys Leu Leu Asp Val Gly Tyr Leu |     |     |
| 305   | 310 | 315 |
| Ile Asn Thr Ser Cys Leu Pro Leu Leu Gln Pro Thr Arg Asp Val Asp |     |     |
| 325   | 330 | 335 |
| Leu Ile Leu Ser Leu Asp Tyr Asn Leu His Gly Ala Phe Gln Gln Leu |     |     |
| 340   | 345 | 350 |
| Gln Leu Leu Gly Arg Phe Cys Gln Glu Gln Gly Ile Pro Phe Pro Pro |     |     |
| 355   | 360 | 365 |
| Ile Ser Pro Ser Pro Glu Glu Gln Leu Gln Pro Arg Glu Cys His Thr |     |     |
| 370   | 375 | 380 |
| Phe Ser Asp Pro Thr Cys Pro Gly Ala Pro Ala Val Leu His Leu Pro |     |     |
| 385   | 390 | 395 |
| Leu Val Ser Asp Ser Phe Arg Glu Tyr Ser Ala Pro Gly Val Arg Arg |     |     |
| 405   | 410 | 415 |
| Thr Pro Glu Glu Ala Ala Ala Gly Glu Val Asn Leu Ser Ser Ser Asp |     |     |
| 420   | 425 | 430 |
| Ser Pro Tyr His Tyr Thr Lys Val Thr Tyr Ser Gln Glu Asp Val Asp |     |     |
| 435   | 440 | 445 |
| Lys Leu Leu His Leu Thr His Tyr Asn Val Cys Asn Asn Gln Glu Gln |     |     |
| 450   | 455 | 460 |
| Leu Leu Glu Ala Leu Arg Gln Ala Val Gln Arg Arg Arg Gln Arg Arg |     |     |
| 465   | 470 | 475 |
| Pro His   |     | 480 |

&lt;210&gt; 2268

&lt;211&gt; 520

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2268

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Met Asn Tyr Lys Gln Lys Asp Leu Asp Asn Phe Thr Ser Lys Gly Lys
  1              5              10              15
His Leu Leu Ser Glu Leu Lys Lys Ile His Ser Ser Asp Phe Ser Leu
      20              25              30
Val Lys Thr Asp Met Glu Ser Thr Val Asp Lys Trp Leu Asp Val Ser
      35              40              45
Glu Lys Leu Glu Glu Asn Met Asp Arg Leu Arg Val Ser Leu Ser Ile
      50              55              60
Trp Asp Asp Val Leu Ser Thr Arg Asp Glu Ile Glu Gly Trp Ser Asn
      65              70              75              80
Asn Cys Val Pro Gln Met Ala Glu Asn Ile Ser Asn Leu Asp Asn His
      85              90              95
Leu Arg Ala Glu Glu Leu Leu Lys Glu Phe Glu Ser Glu Val Lys Asn
      100             105             110
Lys Ala Leu Arg Leu Glu Glu Leu His Ser Lys Val Asn Asp Leu Lys
      115             120             125
Glu Leu Thr Lys Asn Leu Glu Thr Pro Pro Asp Leu Gln Phe Ile Glu
      130             135             140
Ala Asp Leu Met Gln Lys Leu Glu His Ala Lys Glu Ile Thr Glu Val
      145             150             155             160
Ala Lys Gly Thr Leu Lys Asp Phe Thr Ala Gln Ser Thr Gln Val Glu
      165             170             175
Lys Phe Ile Asn Asp Ile Thr Thr Trp Phe Thr Lys Val Glu Glu Ser
      180             185             190
Leu Met Asn Cys Ala Gln Asn Glu Thr Cys Glu Ala Leu Lys Lys Val

```

|   |     |     |
|---|-----|-----|
| 195   | 200 | 205 |
| Lys Asp Ile Gln Lys Glu Leu Gln Ser Gln Gln Ser Asn Ile Ser Ser |     |     |
| 210   | 215 | 220 |
| Thr Gln Glu Asn Leu Asn Ser Leu Cys Arg Lys Tyr His Pro Ala Glu |     |     |
| 225   | 230 | 235 |
| Leu Glu Ser Leu Gly Arg Ala Met Thr Gly Leu Ile Lys Lys His Glu |     |     |
| 245   | 250 | 255 |
| Ala Val Ser Gln Leu Cys Ser Lys Thr Gln Ala Ser Leu Gln Glu Ser |     |     |
| 260   | 265 | 270 |
| Leu Glu Lys His Phe Ser Glu Ser Met Gln Glu Phe Gln Glu Trp Phe |     |     |
| 275   | 280 | 285 |
| Leu Gly Ala Lys Ala Ala Ala Lys Glu Ser Ser Asp Arg Thr Gly Asp |     |     |
| 290   | 295 | 300 |
| Ser Lys Val Leu Glu Ala Lys Leu His Asp Leu Gln Asn Ile Leu Asp |     |     |
| 305   | 310 | 315 |
| Ser Val Ser Asp Gly Gln Ser Lys Leu Asp Ala Val Thr Gln Glu Gly |     |     |
| 325   | 330 | 335 |
| Gln Thr Leu Tyr Ala His Leu Ser Lys Gln Ile Val Ser Ser Ile Gln |     |     |
| 340   | 345 | 350 |
| Glu Gln Ile Thr Lys Ala Asn Glu Glu Phe Gln Ala Phe Leu Lys Gln |     |     |
| 355   | 360 | 365 |
| Cys Leu Lys Asp Lys Gln Ala Leu Gln Asp Cys Ala Ser Glu Leu Gly |     |     |
| 370   | 375 | 380 |
| Ser Phe Glu Asp Gln His Arg Lys Leu Asn Leu Trp Ile His Glu Met |     |     |
| 385   | 390 | 395 |
| Glu Glu Arg Phe Asn Thr Glu Asn Leu Gly Glu Ser Lys Gln His Ile |     |     |
| 405   | 410 | 415 |
| Pro Glu Lys Lys Asn Glu Val His Lys Val Glu Met Phe Leu Gly Glu |     |     |
| 420   | 425 | 430 |

Leu Leu Ala Ala Arg Glu Ser Leu Asp Glu Leu Ser Gln Arg Gly Gln

435

440

445

Leu Leu Ser Glu Glu Gly His Gly Ala Gly Gln Glu Gly Arg Leu Cys

450

455

460

Ser Gln Leu Leu Thr Ser His Gln Asn Leu Leu Arg Met Thr Lys Glu

465

470

475

480

Lys Leu Arg Ser Cys Gln Val Ala Leu Gln Glu His Glu Ala Leu Glu

485

490

495

Glu Ala Leu Gln Ser Met Trp Phe Trp Val Lys Ala Ile Gln Asp Arg

500

505

510

Leu Ala Cys Ala Val Phe Thr Pro

515

520

&lt;210&gt; 2269

&lt;211&gt; 109

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2269

Met Ile Val Ser Ser Gln Gln Asp Leu Val Lys Cys Val Ala Thr His

1

5

10

15

Pro Arg Cys Ser His Asp Ser Glu Leu Ser Gly Asp Leu Val Lys Cys

20

25

30

Val Glu Thr Pro Pro Cys Cys Ser His Glu Ser Glu Pro Arg Glu Thr

35

40

45

Trp Leu Ser Val Gln His Leu Pro Leu Ala Val Leu Ile Thr Val Ser

50

55

60

Cys His Glu Ile Trp Leu Phe Arg Ser Val Trp His Leu Pro Leu Cys

出証特 2 0 0 4 - 3 0 5 9 6 6 0

<210> 2271

<211> 103

<212> PRT

<213> Homo sapiens

<400> 2271

|     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| Met | Arg | Gln | Ser | Leu | Val | Leu | Ser | Pro | Lys | Leu | Glu | Cys | Ser | Gly | Thr |
| 1   |     |     |     | 5   |     |     |     |     | 10  |     |     |     |     | 15  |     |
| Ile | Ser | Gly | His | Cys | Asn | His | Arg | Leu | Pro | Cys | Ser | Asn | Asn | Ser | Pro |
|     |     |     |     | 20  |     |     |     | 25  |     |     |     |     |     | 30  |     |
| Ala | Ser | Ala | Pro | Arg | Val | Ala | Gly | Ile | Thr | Ser | Val | Cys | His | His | Ala |
|     |     |     |     | 35  |     |     |     | 40  |     |     |     |     |     | 45  |     |
| Gln | Leu | Ile | Phe | Val | Phe | Leu | Val | Glu | Thr | Gly | Phe | Tyr | His | Val | Gly |
|     |     |     |     | 50  |     |     |     | 55  |     |     |     |     |     | 60  |     |
| Gln | Ala | Gly | Leu | Glu | Leu | Leu | Thr | Ser | Ser | Asp | Leu | Pro | Ser | Ser | Ala |
|     |     |     |     | 65  |     |     |     | 70  |     |     |     |     |     | 75  |     |
| Ser | Gln | Ser | Ala | Gly | Ile | Thr | Gly | Val | Ser | His | His | Thr | Trp | Pro | Lys |
|     |     |     |     |     |     |     |     | 85  |     |     |     |     |     | 90  |     |
|     |     |     |     |     |     |     |     |     |     |     |     |     |     |     | 95  |
| Leu | Val | Tyr | Ile | Arg | Thr | Arg |     |     |     |     |     |     |     |     |     |
|     |     |     |     |     |     |     |     |     |     |     |     |     |     |     | 100 |

<210> 2272

<211> 152

<212> PRT

<213> Homo sapiens

<400> 2272

Met Ile Leu Gly Met Gly Leu Trp Ile Asp Pro Pro Arg Asp Glu Lys

1 5 10 15  
Ala Gly Arg Ile Cys Gln Gln Arg His Gly Ala Asp Pro Ala Arg Cys  
20 25 30  
Pro Arg Ala Val Pro Ser Ala Gln Arg Gly Ala Val His His Pro Gly  
35 40 45  
Tyr Trp Asn Pro Leu Pro Arg Ile Phe Phe Ser Pro Ser Thr Thr Ala  
50 55 60  
Glu Asn Gln Ser Ala Arg Pro Ser Pro Val Arg Cys Leu His Ser Gly  
65 70 75 80  
Thr Ser Ala Leu Thr Ser Cys Lys Pro Asn Leu Thr Phe Thr Gly Ser  
85 90 95  
Lys Ile Ser Ile Ser Gly Ser Gln Trp Ser Asp Pro Thr Ser Pro Pro  
100 105 110  
Ser Gln Gly Gln Thr Thr Glu Glu Trp Ser Tyr Leu Val Phe Leu His  
115 120 125  
Phe Pro Ala Lys Gly Lys Met Val Leu Pro Ala Lys Leu Ser Leu Gln  
130 135 140  
Pro Gly Gly Ala Ser Ile Lys Val  
145 150

&lt;210&gt; 2273

&lt;211&gt; 164

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2273

Met Ala Pro Trp Ser Tyr Phe Leu Ser Gln Thr Phe Ser His Ser Phe  
1 5 10 15



Asp Leu Ile Gln Asp Phe Lys Ile Leu Lys Ser Ser Pro Ala Lys Gly  
20 25 30  
Arg Met Gly Gly His Val Asn Asp Lys Gln Arg Arg Thr Leu Val Asn  
35 40 45  
Asp Lys Asp Arg Phe Leu Pro Val Met His Tyr Cys Asn Gln Glu Arg  
50 55 60  
Ser Pro Ala Arg Ala Asp Phe Asp Leu Cys Arg Gly Asp Trp Val Leu  
65 70 75 80  
Ser Arg Glu Asn Glu Gly Thr Arg Cys Gly Gly Ser Cys Met Pro Val  
85 90 95  
Ile Pro Ala Leu Trp Glu Ala Asp Val Val Gly Ser Leu Gly Ile Gly  
100 105 110  
Ser Leu Arg Pro Ala Trp Leu Thr Phe Phe Phe Pro Ser Leu Pro Lys  
115 120 125  
Lys Thr Lys Asn Lys Asn Trp Pro Ala Ala Val Ala Arg Pro Val Val  
130 135 140  
Pro Ala Thr Arg Gly Ala Glu Val Gly Glu Leu Leu Gly Pro Gly Arg  
145 150 155 160  
Arg Arg Leu Arg

&lt;210&gt; 2274

&lt;211&gt; 121

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2274

Met Pro Leu Ser Arg Arg Ser Gly Asp Ser Pro Ala Pro Arg Ile Pro

|   |     |     |    |
|---|-----|-----|----|
| 1   | 5   | 10  | 15 |
| Gly Trp Arg Asp Ala Ser Arg Pro Arg Gly Leu Val Ala Arg Ala Gly |     |     |    |
| 20  | 25  | 30  |    |
| Arg Arg Thr Arg Arg Arg Ala Leu Pro Gly Leu Ala Trp Ala Cys Ser |     |     |    |
| 35  | 40  | 45  |    |
| Glu Pro Gly Cys Phe Ser Val Thr Thr Gln Ile Gly Gly Ile Trp Arg |     |     |    |
| 50  | 55  | 60  |    |
| Phe Cys Gly Ser Pro Ala Ala Lys Leu Arg Gly Arg Arg Gly Leu Glu |     |     |    |
| 65  | 70  | 75  | 80 |
| Ala Cys Thr Thr Cys Ser Pro Arg Pro Ser Met His Pro Gly Trp Asn |     |     |    |
| 85  | 90  | 95  |    |
| Ala Val Val Gln Thr Arg Leu Ala Ala Ala Phe Thr Ser Trp Ala Gln |     |     |    |
| 100   | 105 | 110 |    |
| Ala Leu Leu Pro Pro Gln Pro Cys Lys                             |     |     |    |
| 115   | 120 |     |    |

&lt;210&gt; 2275

&lt;211&gt; 197

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2275

|   |    |    |    |
|---|----|----|----|
| Met Leu Asn Gly Thr His Gly Pro Ser Ser Glu Lys Lys Ser Asn Ile |    |    |    |
| 1   | 5  | 10 | 15 |
| Pro Asp Leu Ser Ile Tyr Leu Lys Gly Glu Asp Ala Phe Asp Ala Leu |    |    |    |
| 20  | 25 | 30 |    |
| Pro Pro Ser Leu Pro Pro Pro Pro Pro Pro Ala Arg His Ser Leu Ile |    |    |    |
| 35  | 40 | 45 |    |

Glu His Ser Lys Pro Pro Gly Ser Ser Ser Arg Pro Ser Ser Gly Gln  
50 55 60  
Asp Leu Leu Leu Leu Pro Ser Asp Pro Phe Val Asp Leu Ala Ser Gly  
65 70 75 80  
Gln Val Pro Leu Pro Pro Ala Arg Arg Leu Pro Gly Glu Asn Val Lys  
85 90 95  
Thr Asn Arg Thr Ser Gln Asp Tyr Asp Gln Leu Pro Ser Cys Ser Asp  
100 105 110  
Gly Ser Gln Ala Pro Ala Arg Pro Pro Lys Pro Arg Pro Arg Arg Thr  
115 120 125  
Ala Pro Glu Ile His His Arg Lys Pro His Gly Pro Glu Ala Ala Leu  
130 135 140  
Glu Asn Val Asp Ala Lys Ile Ala Lys Leu Met Gly Glu Gly Tyr Ala  
145 150 155 160  
Phe Glu Glu Val Lys Arg Ala Leu Glu Ile Ala Gln Asn Asn Val Glu  
165 170 175  
Val Ala Arg Ser Ile Leu Arg Glu Phe Ala Phe Pro Pro Pro Val Ser  
180 185 190  
Pro Arg Leu Asn Leu  
195

&lt;210&gt; 2276

&lt;211&gt; 108

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2276

Met Gln Phe Glu Phe Met Ile Glu Ser Ile Leu Tyr Ala Arg Asp Ala

|     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| 1   | 5   | 10  | 15  |     |     |     |     |     |     |     |     |     |     |     |     |
| Trp | Leu | Lys | Glu | Asp | Gly | Val | Ile | Trp | Pro | Thr | Met | Ala | Ala | Leu | His |
|     | 20  |     | 25  |     | 30  |     |     |     |     |     |     |     |     |     |     |
| Leu | Val | Pro | Cys | Ser | Ala | Asp | Lys | Asp | Tyr | Arg | Ser | Lys | Val | Leu | Phe |
|     | 35  |     | 40  |     | 45  |     |     |     |     |     |     |     |     |     |     |
| Trp | Asp | Asn | Ala | Tyr | Glu | Phe | Asn | Leu | Ser | Ala | Leu | Lys | Ser | Leu | Ala |
|     | 50  |     | 55  |     | 60  |     |     |     |     |     |     |     |     |     |     |
| Val | Lys | Glu | Phe | Phe | Ser | Lys | Pro | Lys | Tyr | Asn | His | Ile | Leu | Lys | Pro |
|     | 65  |     | 70  |     | 75  |     |     |     |     |     |     |     |     |     |     |
| Glu | Asp | Cys | Leu | Ser | Glu | Pro | Cys | Thr | Ile | Leu | Gln | Leu | Asp | Met | Arg |
|     | 85  |     | 90  |     | 95  |     |     |     |     |     |     |     |     |     |     |
| Thr | Val | Gln | Ile | Ser | Asp | Leu | Glu | Val | Arg | Lys | Arg |     |     |     |     |
|     | 100 |     | 105 |     |     |     |     |     |     |     |     |     |     |     |     |

&lt;210&gt; 2277

&lt;211&gt; 213

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2277

|     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| Met | Asp | Arg | Arg | Lys | Gly | Asp | Arg | Thr | Leu | Pro | Val | Arg | Thr | Pro | Thr |
| 1   | 5   |     |     |     | 10  |     |     |     | 15  |     |     |     |     |     |     |
| Met | Ala | Gly | Gly | Leu | Phe | Ser | Ile | Asp | Arg | Asn | Tyr | Phe | Glu | Glu | Ile |
|     | 20  |     | 25  |     | 30  |     |     |     |     |     |     |     |     |     |     |
| Gly | Thr | Tyr | Asp | Ala | Gly | Met | Asp | Ile | Trp | Gly | Gly | Glu | Asn | Leu | Glu |
|     | 35  |     | 40  |     | 45  |     |     |     |     |     |     |     |     |     |     |
| Met | Ser | Phe | Arg | Ile | Trp | Gln | Cys | Gly | Gly | Ser | Leu | Glu | Ile | Val | Thr |
|     | 50  |     | 55  |     | 60  |     |     |     |     |     |     |     |     |     |     |

Cys Ser His Val Gly His Val Phe Arg Lys Ala Thr Pro Tyr Thr Phe  
65 70 75 80  
Pro Gly Gly Thr Gly His Val Ile Asn Lys Asn Asn Arg Arg Leu Ala  
85 90 95  
Glu Val Trp Met Asp Glu Phe Lys Asp Phe Phe Tyr Ile Ile Ser Pro  
100 105 110  
Gly Val Val Lys Val Asp Tyr Gly Asp Val Ser Val Arg Lys Thr Leu  
115 120 125  
Arg Glu Asn Leu Lys Cys Lys Pro Phe Ser Trp Tyr Leu Glu Asn Ile  
130 135 140  
Tyr Pro Asp Ser Gln Ile Pro Arg Arg Tyr Tyr Ser Leu Gly Glu Ile  
145 150 155 160  
Arg Asn Val Glu Thr Asn Gln Cys Leu Asp Asn Met Gly Arg Lys Glu  
165 170 175  
Asn Glu Lys Val Gly Ile Phe Asn Cys His Gly Met Gly Gly Asn Gln  
180 185 190  
Thr Gln Trp Thr Cys Asn His Val Lys Met Pro Pro Tyr Glu Arg Lys  
195 200 205  
Ser Val Met Gly Ile  
210

&lt;210&gt; 2278

&lt;211&gt; 352

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2278

Met Lys Asn Trp Arg Leu Ser Ser Trp Leu Trp Ser Gly Ala Ser Pro

1                      5                      10                      15  
Gln Pro Trp Arg Ser Ser Lys Ala Lys Pro Arg Pro Glu Ala Pro His  
                    20                      25                      30  
Pro Gly Leu Glu Thr Thr Leu Gln Glu Arg Leu Ala Leu Tyr Gln Thr  
                    35                      40                      45  
Ala Ile Glu Ser Ala Arg Gln Ala Gly Asp Ser Ala Lys Met Arg Arg  
                    50                      55                      60  
Tyr Asp Arg Gly Leu Lys Thr Leu Glu Asn Leu Leu Ala Ser Ile Arg  
65                      70                      75                      80  
Lys Gly Asn Ala Ile Asp Glu Ala Asp Ile Pro Pro Pro Val Ala Ile  
                    85                      90                      95  
Gly Lys Gly Pro Ala Ser Thr Pro Thr Tyr Ser Pro Ala Pro Thr Gln  
                    100                      105                      110  
Pro Ala Pro Arg Ile Ala Ser Ala Pro Glu Pro Arg Val Thr Leu Glu  
                    115                      120                      125  
Gly Pro Ser Ala Thr Ala Pro Ala Ser Ser Pro Gly Leu Ala Lys Pro  
                    130                      135                      140  
Gln Met Pro Pro Gly Pro Cys Ser Pro Gly Pro Leu Ala Gln Leu Gln  
145                      150                      155                      160  
Ser Arg Gln Arg Asp Tyr Lys Leu Ala Ala Leu His Ala Lys Gln Gln  
                    165                      170                      175  
Gly Asp Thr Thr Ala Ala Ala Arg His Phe Arg Val Ala Lys Ser Phe  
                    180                      185                      190  
Asp Ala Val Leu Glu Ala Leu Ser Arg Gly Glu Pro Val Asp Leu Ser  
                    195                      200                      205  
Cys Leu Pro Pro Pro Pro Asp Gln Leu Pro Pro Asp Pro Pro Ser Pro  
                    210                      215                      220  
Pro Ser Gln Pro Pro Thr Pro Ala Thr Ala Pro Ser Thr Thr Glu Val  
225                      230                      235                      240

Pro Pro Pro Pro Arg Thr Leu Leu Glu Ala Leu Glu Gln Arg Met Glu

245

250

255

Arg Tyr Gln Val Ala Ala Ala Gln Ala Lys Ser Lys Gly Asp Gln Arg

260

265

270

Lys Ala Arg Met His Glu Arg Ile Val Lys Gln Tyr Gln Asp Ala Ile

275

280

285

Arg Ala His Lys Ala Gly Arg Ala Val Asp Val Ala Glu Leu Pro Val

290

295

300

Pro Pro Gly Phe Pro Pro Ile Gln Gly Leu Glu Ala Thr Lys Pro Thr

305

310

315

320

Gln Gln Ser Leu Val Gly Val Leu Glu Thr Ala Met Lys Leu Ala Asn

325

330

335

Gln Asp Glu Gly Pro Glu Asp Glu Glu Asp Glu Val Pro Lys Lys Val

340

345

350

&lt;210&gt; 2279

&lt;211&gt; 148

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2279

Met Ala Arg Lys Gly Ala Arg Arg Pro Arg Gln Gly Pro Gly Ser His

1

5

10

15

Lys Trp Leu Gln Pro Gly Ser Arg Arg Glu Lys Glu Arg Ile Pro Gln

20

25

30

Pro Pro Pro Pro Ala Arg Pro Pro Arg Asp Ala Ala Pro Arg Arg Val

35

40

45

Leu Val Pro Ala Val Arg Arg Val Pro Glu Ser Gly His Phe Ala Gly

50                      55                      60  
 Arg Pro Trp Ala Pro Gln Cys His Pro Lys Gly Leu Arg Arg Pro Ser  
 65                      70                      75                      80  
 Ala Glu Ser His Ser Val Ala Gln Ala Gly Val Gln Cys His Asp Leu  
                          85                      90                      95  
 Gly Ser Leu Gln Pro Pro Pro Pro Ser Ser Gly Asp Ser Pro Ala Ser  
                          100                      105                      110  
 Ala Ser Arg Val Ala Gly Ile Thr Ser Thr Val Pro Gly Thr Leu Ser  
                          115                      120                      125  
 Ala Leu Asp Asp Cys Cys Leu Ile Thr Glu Leu Pro Tyr Lys Pro Pro  
                          130                      135                      140  
 Ala Val Leu Tyr  
 145

<210> 2280

<211> 571

<212> PRT

<213> Homo sapiens

<400> 2280

Met Ala Pro Ser Leu Arg His Ser Val Gln Gln Phe His His His Pro  
 1                      5                      10                      15  
 Ser Thr Ala Leu His Gly Glu Ser Val Ala His Ser Pro Arg Phe Ser  
                          20                      25                      30  
 Pro Asn Pro Pro Gln Gln Gly Ala Val Arg Pro Gln Thr Leu Asn Phe  
                          35                      40                      45  
 Ser Ser Arg Ser Gln Thr Val Pro Ser Pro Thr Ile Asn Asn Ser Gly  
                          50                      55                      60



Gln Tyr Ser Arg Tyr Pro Tyr Ser Asn Leu Asn Gln Gly Leu Val Asn  
 65 70 75 80  
 Asn Thr Gly Met Asn Gln Asn Leu Gly Leu Thr Asn Asn Thr Pro Met  
 85 90 95  
 Asn Gln Ser Val Pro Arg Tyr Pro Asn Ala Val Gly Phe Pro Ser Asn  
 100 105 110  
 Ser Gly Gln Gly Leu Met His Gln Gln Pro Ile His Pro Ser Gly Ser  
 115 120 125  
 Leu Asn Gln Met Asn Thr Gln Thr Met His Pro Ser Gln Pro Gln Gly  
 130 135 140  
 Thr Tyr Ala Ser Pro Pro Pro Met Ser Pro Met Lys Ala Met Ser Asn  
 145 150 155 160  
 Pro Ala Gly Thr Pro Pro Pro Gln Val Arg Pro Gly Ser Ala Gly Ile  
 165 170 175  
 Pro Met Glu Val Gly Ser Tyr Pro Asn Ile Pro His Pro Gln Pro Ser  
 180 185 190  
 His Gln Pro Pro Gly Ala Met Gly Ile Gly Gln Arg Asn Met Gly Pro  
 195 200 205  
 Arg Asn Met Gln Gln Ser Arg Pro Phe Ile Gly Met Ser Ser Ala Pro  
 210 215 220  
 Arg Glu Leu Thr Gly His Met Arg Pro Asn Gly Cys Pro Gly Val Gly  
 225 230 235 240  
 Leu Gly Asp Pro Gln Ala Ile Gln Glu Arg Leu Ile Pro Gly Gln Gln  
 245 250 255  
 His Pro Gly Gln Gln Pro Ser Phe Gln Gln Leu Pro Thr Cys Pro Pro  
 260 265 270  
 Leu Gln Pro His Pro Gly Leu His His Gln Ser Ser Pro Pro His Pro  
 275 280 285  
 His His Gln Pro Trp Ala Gln Leu His Pro Ser Pro Gln Asn Thr Pro

|   |     |         |
|---|-----|---------|
| 290   | 295 | 300     |
| Gln Lys Val Pro Val His Gln His Ser Pro Ser Glu Pro Phe Leu Glu |     |         |
| 305   | 310 | 315 320 |
| Lys Pro Val Pro Asp Met Thr Gln Val Ser Gly Pro Asn Ala Gln Leu |     |         |
| 325   | 330 | 335     |
| Val Lys Ser Asp Asp Tyr Leu Pro Ser Ile Glu Gln Gln Pro Gln Gln |     |         |
| 340   | 345 | 350     |
| Lys Lys Lys Lys Lys Lys Asn Asn His Ile Val Ala Glu Asp Pro Ser |     |         |
| 355   | 360 | 365     |
| Lys Gly Phe Gly Lys Asp Asp Phe Pro Gly Gly Val Asp Asn Gln Glu |     |         |
| 370   | 375 | 380     |
| Leu Asn Arg Asn Ser Leu Asp Gly Ser Gln Glu Glu Lys Lys Lys Lys |     |         |
| 385   | 390 | 395 400 |
| Lys Arg Ser Lys Ala Lys Lys Asp Pro Lys Glu Pro Lys Glu Pro Lys |     |         |
| 405   | 410 | 415     |
| Glu Lys Lys Glu Pro Lys Glu Pro Lys Thr Pro Lys Ala Pro Lys Ile |     |         |
| 420   | 425 | 430     |
| Pro Lys Glu Pro Lys Glu Lys Lys Ala Lys Thr Ala Thr Pro Lys Pro |     |         |
| 435   | 440 | 445     |
| Lys Ser Ser Lys Lys Ser Ser Asn Lys Lys Pro Asp Ser Glu Ala Ser |     |         |
| 450   | 455 | 460     |
| Ala Leu Lys Lys Lys Val Asn Lys Gly Lys Thr Glu Gly Pro Glu Asn |     |         |
| 465   | 470 | 475 480 |
| Ser Asp Leu Asp Lys Thr Pro Pro Pro Ser Pro Pro Pro Glu Glu Asp |     |         |
| 485   | 490 | 495     |
| Glu Asp Pro Gly Val Gln Lys Arg Arg Ser Ser Arg Gln Val Lys Arg |     |         |
| 500   | 505 | 510     |
| Lys Arg Tyr Thr Glu Asp Leu Glu Phe Lys Ile Ser Asp Glu Glu Ala |     |         |
| 515   | 520 | 525     |

Asp Asp Ala Asp Ala Ala Gly Arg Asp Ser Pro Ser Asn Thr Ser Gln  
 530 535 540  
 Ser Glu Gln Gln Glu Ser Val Asp Ala Glu Gly Pro Val Val Glu Lys  
 545 550 555 560  
 Ile Met Ser Ser Arg Ser Val Lys Lys Lys Lys  
 565 570

<210> 2281

<211> 139

<212> PRT

<213> Homo sapiens

<400> 2281

Met Phe Ile Met Leu Phe Phe Leu Thr Ile Ser His Phe Leu Phe Pro  
 1 5 10 15  
 Ser Cys Pro Phe Phe Phe Phe Phe Phe Phe Glu Ser Glu Phe His  
 20 25 30  
 Ser Cys Cys Pro Gly Trp Ile Ser Val Ala Arg Ser Arg Leu Thr Glu  
 35 40 45  
 Thr Ser Ala Ser Arg Ile Gln Ala Ile Leu Leu Ser Arg Pro Ser Arg  
 50 55 60  
 Trp Leu Gly Leu Gln Ala Cys Ala Thr Met Pro Gly Tyr Leu Val Val  
 65 70 75 80  
 Val Val Val Val Val Leu Leu Val Glu Thr Met Phe Leu His Phe Gly  
 85 90 95  
 Gln Ala Gly Leu Glu Leu Leu Thr Ser Gly Asp Pro Ala Ala Ser Ala  
 100 105 110  
 Ser Gln Ser Thr Gly Ile Thr Arg Met Arg Asp Arg Ala Gln Pro Pro

115 120 125  
 Leu Ser Ile Tyr Ile Leu Gln Leu Leu Lys Leu  
 130 135

<210> 2282

<211> 133

<212> PRT

<213> Homo sapiens

<400> 2282

Met Leu Trp Glu Trp Gly Val Cys Phe Gly Val Ser Asp Lys Phe Pro  
 1 5 10 15  
 Gly Asp Cys Ile Val Gln Pro Gln Ser Arg Thr Ser Thr Pro Gly Ser  
 20 25 30  
 Leu Leu Ser Pro Thr Val Cys Tyr Gly Ala Leu Ser Val Thr Ser Leu  
 35 40 45  
 Ile Ala Val Thr Lys Asp Arg Thr Gln Thr Ile Trp Val Thr Leu Gly  
 50 55 60  
 Ala Asp Glu Gln Val Pro Gly Arg Lys Gly Leu Gly Ser Glu Asp Leu  
 65 70 75 80  
 Gly Cys Asp Leu Leu Gln Ile Val Ile Gly Leu Ala Leu Ser Thr Trp  
 85 90 95  
 Glu Gln Arg Glu Leu Glu Ala Ser Pro Ala Cys Leu Gly Trp Lys Ala  
 100 105 110  
 Gly Phe Pro Phe Ala Ala Gly Trp Leu Pro Phe Leu Thr Leu Ser Leu  
 115 120 125  
 Gln Ser Tyr Asn Thr  
 130

&lt;210&gt; 2283

&lt;211&gt; 453

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2283

Met Leu His Arg Asp Ser Thr Ile Ser Asn Glu Ser Ser Gln Ser Cys

1 5 10 15

Ser Ser Gly Arg Gln Asn Ile Arg Leu His Ser Asp Ser Ser Ser Ser

20 25 30

Thr Gln Val Phe Glu Ser Val Asp Glu Val Glu Gln Val Glu Ala Glu

35 40 45

Gly Arg Leu Glu Glu Lys Gln Pro Lys Ile Pro Asn Gly Asn Leu Val

50 55 60

Asn Gly Thr Cys Ser Pro Asp Ser Gly His Pro Ser Ser His Asn Phe

65 70 75 80

Ser Ser Gly Leu Ser Glu His Ser Glu Pro Ser Leu Ser Thr Glu Asp

85 90 95

Ser Val Leu Asp Ala Gln Arg Asn Thr Pro Thr Val Leu Arg Pro Arg

100 105 110

Asp Gly Ser Val Asp Asp Arg Gln Ser Ser Glu Ala Thr Thr Ser Gln

115 120 125

Asp Glu Ala Pro Arg Glu Glu Leu Ala Val Gln Asp Ser Leu Glu Ser

130 135 140

Asp Leu Leu Ala Asn Glu Ser Met Asp Glu Phe Met Ser Ile Thr Gly

145 150 155 160

Ser Leu Asp Met Ala Leu Pro Glu Lys Asp Asp Val Val Met Glu Gly

|   |     |     |
|---|-----|-----|
| 165   | 170 | 175 |
| Trp Arg Ser Ser Glu Thr Glu Lys His Gly Gln Ala Asp Ser Glu Asp |     |     |
| 180   | 185 | 190 |
| Asn Leu Ser Glu Glu Pro Glu Met Glu Ser Leu Phe Pro Ala Leu Ala |     |     |
| 195   | 200 | 205 |
| Ser Leu Ala Val Thr Thr Ser Ala Asn Glu Val Ser Pro Val Ser Ser |     |     |
| 210   | 215 | 220 |
| Ser Gly Val Thr Tyr Ser Pro Glu Leu Leu Asp Leu Tyr Thr Val Asn |     |     |
| 225   | 230 | 235 |
| 240   |     |     |
| Leu His Arg Ile Glu Lys Asp Val Gln Arg Cys Asp Arg Asn Tyr Trp |     |     |
| 245   | 250 | 255 |
| Tyr Phe Thr Pro Ala Asn Leu Glu Lys Leu Arg Asn Ile Met Cys Ser |     |     |
| 260   | 265 | 270 |
| Tyr Ile Trp Gln His Ile Glu Ile Gly Tyr Val Gln Gly Met Cys Asp |     |     |
| 275   | 280 | 285 |
| Leu Leu Ala Pro Leu Leu Val Ile Leu Asp Asp Glu Ala Leu Ala Phe |     |     |
| 290   | 295 | 300 |
| Ser Cys Phe Thr Glu Leu Met Lys Arg Met Asn Gln Asn Phe Pro His |     |     |
| 305   | 310 | 315 |
| 320   |     |     |
| Gly Gly Ala Met Asp Thr His Phe Ala Asn Met Arg Ser Leu Ile Gln |     |     |
| 325   | 330 | 335 |
| Ile Leu Asp Ser Glu Leu Phe Glu Leu Met His Gln Asn Gly Asp Tyr |     |     |
| 340   | 345 | 350 |
| Thr His Phe Tyr Phe Cys Tyr Arg Trp Phe Leu Leu Asp Phe Lys Arg |     |     |
| 355   | 360 | 365 |
| Glu Leu Val Tyr Asp Asp Val Phe Leu Val Trp Glu Thr Ile Trp Ala |     |     |
| 370   | 375 | 380 |
| Ala Lys His Val Ser Ser Ala His Tyr Val Leu Phe Ile Ala Leu Ala |     |     |
| 385   | 390 | 395 |
| 400   |     |     |

Leu Val Glu Val Tyr Arg Asp Ile Ile Leu Glu Asn Asn Met Asp Phe  
                     405                    410                    415  
 Thr Asp Ile Ile Lys Phe Phe Asn Glu Met Ala Glu Arg His Asn Thr  
                     420                    425                    430  
 Lys Gln Val Leu Lys Leu Ala Arg Asp Leu Val Tyr Lys Val Gln Thr  
                     435                    440                    445  
 Leu Ile Glu Asn Lys  
                     450

<210> 2284

<211> 213

<212> PRT

<213> Homo sapiens

<400> 2284

Met Ser Arg Gln Gly Thr Gly Ser Ser Ala Gln Gly Leu Pro Val Leu  
     1                    5                    10                    15  
 Leu Gly Cys Leu Pro Thr Ala Asp Ser Val Pro Leu Asp Cys Leu Leu  
                     20                    25                    30  
 Gln Lys Phe Leu Leu Leu Met Ala Ser Thr Ser Ala Cys Tyr Lys Leu  
                     35                    40                    45  
 Phe Arg Glu Lys Gln Lys Asp Gly His Gly Glu Ala Ile Met Phe Lys  
                     50                    55                    60  
 Gly Leu Gly Gly Met Ser Ser Lys Arg Ile Thr Ile Asn Lys Ile Leu  
     65                    70                    75                    80  
 Ser Asn Glu Ser Leu Val Gln Asp Asn Leu Tyr Phe Gln Arg Cys Leu  
                     85                    90                    95  
 Asp Trp Asn Arg Asp Ile Leu Lys Lys Glu Leu Gly Leu Thr Glu Gln

|   |     |     |     |
|---|-----|-----|-----|
| 100   | 105 | 110 |     |
| Asp Ile Ile Asp Leu Pro Ala Leu Phe Lys Met Asp Glu Asp His Arg |     |     |     |
| 115   | 120 | 125 |     |
| Ala Arg Ala Phe Phe Pro Asn Met Val Asn Met Ile Val Leu Asp Lys |     |     |     |
| 130   | 135 | 140 |     |
| Asp Leu Gly Ile Pro Lys Pro Phe Gly Pro Gln Val Glu Glu Glu Cys |     |     |     |
| 145   | 150 | 155 | 160 |
| Cys Leu Glu Met His Val Arg Gly Leu Leu Glu Pro Leu Gly Leu Glu |     |     |     |
| 165   | 170 | 175 |     |
| Cys Thr Phe Ile Asp Asp Ile Ser Ala Tyr His Lys Phe Leu Gly Glu |     |     |     |
| 180   | 185 | 190 |     |
| Val His Cys Gly Thr Asn Val Arg Arg Lys Pro Phe Thr Phe Lys Trp |     |     |     |
| 195   | 200 | 205 |     |
| Trp His Met Val Pro   |     |     |     |
| 210   |     |     |     |

&lt;210&gt; 2285

&lt;211&gt; 191

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2285

|   |    |    |    |
|---|----|----|----|
| Met Ala Glu Asn Lys Gly Leu Gly Tyr Pro Asp Ala Arg Phe Ser Val |    |    |    |
| 1   | 5  | 10 | 15 |
| Leu Val Ser Ser Gln Leu Ala Ile Pro Met Pro Leu Leu Ser Ser Val |    |    |    |
| 20  | 25 | 30 |    |
| Gly Gly His Trp Thr Trp Thr Asp Pro Trp Asp Arg Arg Ile Gln Gly |    |    |    |
| 35  | 40 | 45 |    |



Val Leu Phe Ser Phe Asp Phe Phe Tyr Leu Phe Ser Ala Arg Lys Asp  
50 55 60  
Thr Asp Leu Cys Ser Trp Leu Ser Ser Lys Asn His Leu Ser Phe Val  
65 70 75 80  
Pro Leu Ser Cys Lys Arg Glu Val His Phe Ile Cys Leu Phe Cys Lys  
85 90 95  
Thr Leu Gly Val Cys His Gly His Ala Leu Met Met Ser Thr Cys Val  
100 105 110  
Arg Pro Leu Pro Pro Trp Ser Ala Cys Met Val Leu Gln Pro Glu Thr  
115 120 125  
Ala Leu Gly Glu Ile Arg Gly Ser Leu Leu Val Gly Gly Glu His Leu  
130 135 140  
Pro Leu His Ala Gly Arg His Leu Met Lys Pro Gln Arg Pro Gly Ser  
145 150 155 160  
Pro Cys Thr Trp Lys Glu Ser Leu Ser Ser Met Trp Gly Glu Pro Arg  
165 170 175  
Trp Pro Cys Gly Ile His Val Phe Pro Pro Pro Ala Ser Pro Ala  
180 185 190

&lt;210&gt; 2286

&lt;211&gt; 330

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2286

Met Ala Lys Ala Asp Pro Thr Cys Asn Ser Thr Phe Leu His Leu Asp  
1 5 10 15  
Thr Gln Gly Cys Tyr Ser Gly Pro Cys Pro Glu Glu Cys Val Trp Ser

|   |     |     |
|---|-----|-----|
| 20  | 25  | 30  |
| Ser Trp Ser Ser Trp Thr Arg Cys Ser Cys Arg Val Leu Val Gln Gln |     |     |
| 35  | 40  | 45  |
| Arg Tyr Arg His Gln Gly Pro Ala Ser Arg Gly Ala Arg Ala Gly Ala |     |     |
| 50  | 55  | 60  |
| Pro Cys Thr Arg Leu Asp Gly His Phe Arg Pro Cys Leu Ile Ser Asn |     |     |
| 65  | 70  | 75  |
| Cys Ser Glu Asp Ser Cys Thr Pro Pro Phe Glu Phe His Ala Cys Gly |     |     |
| 85  | 90  | 95  |
| Ser Pro Cys Ala Gly Leu Cys Ala Thr His Leu Ser His Gln Leu Cys |     |     |
| 100   | 105 | 110 |
| Gln Asp Leu Pro Pro Cys Gln Pro Gly Cys Tyr Cys Pro Lys Gly Leu |     |     |
| 115   | 120 | 125 |
| Leu Glu Gln Ala Gly Gly Cys Ile Pro Pro Glu Glu Cys Asn Cys Trp |     |     |
| 130   | 135 | 140 |
| His Thr Ser Ala Ala Gly Ala Gly Met Thr Leu Ala Pro Gly Asp Arg |     |     |
| 145   | 150 | 155 |
| Leu Gln Leu Gly Cys Lys Glu Cys Glu Cys Gln Arg Gly Glu Leu His |     |     |
| 165   | 170 | 175 |
| Cys Thr Ser Gln Gly Cys Gln Gly Leu Leu Pro Leu Ser Glu Trp Ser |     |     |
| 180   | 185 | 190 |
| Glu Trp Ser Pro Cys Gly Pro Cys Leu Pro Pro Ser Ala Leu Ala Pro |     |     |
| 195   | 200 | 205 |
| Ala Ser Arg Thr Ala Leu Glu Glu His Trp Leu Arg Asp Pro Thr Gly |     |     |
| 210   | 215 | 220 |
| Leu Ser Pro Thr Leu Ala Pro Leu Leu Ala Ser Glu Gln His Arg His |     |     |
| 225   | 230 | 235 |
| Arg Leu Cys Leu Asp Pro Ala Thr Gly Arg Pro Trp Thr Gly Ala Pro |     |     |
| 245   | 250 | 255 |

His Leu Cys Thr Ala Pro Leu Ser Gln Gln Arg Leu Cys Pro Asp Pro  
 260 265 270  
 Gly Ala Cys Pro Asp Ser Cys Gln Trp Ser Leu Trp Gly Pro Trp Ser  
 275 280 285  
 Pro Cys Gln Val Pro Cys Ser Gly Gly Phe Arg Leu Arg Trp Arg Glu  
 290 295 300  
 Ala Glu Ala Leu Cys Gly Gly Gly Phe Arg Glu Pro Trp Ala Gln Asp  
 305 310 315 320  
 Arg Lys Leu Gln Arg Arg Ala Leu Pro Arg  
 325 330

<210> 2287

<211> 250

<212> PRT

<213> Homo sapiens

<400> 2287

Met Leu Val Arg Ser Val Gly Leu Phe Leu Val Gly Leu Leu Leu Gly  
 1 5 10 15  
 Leu Leu Leu Ala Ala Ala Ala Leu Leu Gly Ser Ala Pro Tyr Tyr Gln  
 20 25 30  
 Pro Gly Ser Val Trp Gly Pro Leu Gly Leu Leu Leu Gly Gly Gly Leu  
 35 40 45  
 Leu Cys Ala Leu Leu Thr Leu Arg Trp Pro Arg Pro Leu Thr Thr Leu  
 50 55 60  
 Ala Thr Ala Val Thr Gly Ala Ala Leu Ile Ala Thr Ala Ala Asp Tyr  
 65 70 75 80  
 Phe Ala Glu Leu Leu Leu Leu Gly Arg Tyr Val Val Glu Arg Leu Arg

|   |     |     |
|---|-----|-----|
| 85  | 90  | 95  |
| Ala Ala Pro Val Pro Pro Leu Cys Trp Arg Ser Trp Ala Leu Leu Ala |     |     |
| 100   | 105 | 110 |
| Leu Trp Pro Leu Leu Ser Leu Met Gly Val Leu Val Gln Trp Arg Val |     |     |
| 115   | 120 | 125 |
| Thr Ala Glu Gly Asp Ser His Thr Glu Val Val Ile Ser Arg Gln Arg |     |     |
| 130   | 135 | 140 |
| Arg Arg Val Gln Leu Met Arg Ile Arg Gln Gln Glu Asp Arg Lys Glu |     |     |
| 145   | 150 | 155 |
| Lys Arg Arg Lys Lys Arg Pro Pro Arg Ala Pro Leu Arg Gly Pro Arg |     |     |
| 165   | 170 | 175 |
| Ala Pro Pro Arg Pro Gly Pro Pro Asp Pro Ala Tyr Arg Arg Arg Pro |     |     |
| 180   | 185 | 190 |
| Val Pro Ile Lys Arg Phe Asn Gly Asp Val Leu Ser Pro Ser Tyr Ile |     |     |
| 195   | 200 | 205 |
| Gln Ser Phe Arg Asp Arg Gln Thr Gly Ser Ser Leu Ser Ser Phe Met |     |     |
| 210   | 215 | 220 |
| Ala Ser Pro Thr Asp Ala Asp Tyr Glu Tyr Gly Ser Arg Gly Pro Leu |     |     |
| 225   | 230 | 235 |
| Thr Ala Cys Ser Gly Pro Pro Val Arg Val                         |     | 240 |
| 245   | 250 |     |

&lt;210&gt; 2288

&lt;211&gt; 160

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2288

Met His Gly Leu Arg Glu Gln Phe Ser His Pro Arg Trp Pro Ala Ser  
 1 5 10 15  
 Leu Cys Leu Cys Phe Pro Ala Leu Thr Pro Asp Val Val His Gln Ser  
 20 25 30  
 Leu Phe Met Ser Ala Leu Ser Ala His Pro Asp Arg Ser Leu Ser Val  
 35 40 45  
 Cys Trp Glu Gln His Cys Lys Leu Leu Pro Gly Val Ala Gly Ile Ser  
 50 55 60  
 Ala Ser Thr Val Ala Lys Trp Thr Ile Asp Glu Val Phe Gly Phe Val  
 65 70 75 80  
 Gln Thr Leu Thr Gly Cys Glu Asp Gln Ala Arg Leu Phe Lys Asp Glu  
 85 90 95  
 Ala Arg Ile Val Arg Val Thr His Val Ser Gly Lys Thr Leu Val Trp  
 100 105 110  
 Thr Val Ala Gln Leu Gly Asp Leu Val Cys Ser Asp His Leu Gln Glu  
 115 120 125  
 Gly Lys Gly Ile Leu Glu Thr Gly Val His Ser Leu Leu Cys Ser Leu  
 130 135 140  
 Pro Thr His Leu Leu Ala Lys Leu Ser Phe Ala Ser Asp Ser Gln Tyr  
 145 150 155 160

&lt;210&gt; 2289

&lt;211&gt; 109

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2289

Met Ala Ala Pro Leu Gln Glu Arg Gln Leu Gly Cys Leu Arg Pro Asp

|     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| 1   | 5   | 10  | 15  |     |     |     |     |     |     |     |     |     |     |     |     |
| Gly | Gln | Arg | Leu | Pro | Trp | Pro | Arg | Val | Val | Thr | Val | Leu | Arg | Pro | Leu |
|     | 20  |     | 25  |     | 30  |     |     |     |     |     |     |     |     |     |     |
| Arg | Ala | Ala | Gln | Ser | Gly | Lys | Lys | Ser | Ala | Glu | Pro | Gly | Lys | Phe | Leu |
|     | 35  |     | 40  |     | 45  |     |     |     |     |     |     |     |     |     |     |
| Ser | Val | Ser | Ser | Gly | Leu | Glu | Gly | Ala | Gly | Ile | Asp | Arg | Ala | Glu | Ala |
|     | 50  |     | 55  |     | 60  |     |     |     |     |     |     |     |     |     |     |
| Ala | Arg | Ala | Trp | Cys | Cys | Phe | Gly | Ile | Gly | Gly | Arg | Arg | Ala | Glu | Pro |
|     | 65  |     | 70  |     | 75  |     |     |     |     |     |     |     |     |     |     |
| Pro | Ala | Pro | Trp | Val | Trp | Phe | His | Pro | Trp | Pro | Val | Pro | Gly | Thr | Arg |
|     | 85  |     | 90  |     | 95  |     |     |     |     |     |     |     |     |     |     |
| Gln | Leu | Leu | Leu | Cys | Ala | Tyr | Trp | Cys | His | His | Val | Ile |     |     |     |
|     | 100 |     | 105 |     |     |     |     |     |     |     |     |     |     |     |     |

&lt;210&gt; 2290

&lt;211&gt; 235

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2290

|     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| Met | Ala | Arg | Glu | Glu | Cys | Lys | Ala | Leu | Leu | Asp | Gly | Leu | Asn | Lys | Thr |
| 1   | 5   |     | 10  |     | 15  |     |     |     |     |     |     |     |     |     |     |
| Thr | Ala | Cys | Tyr | His | His | Leu | Val | Leu | Thr | Val | Gly | Gly | Ser | Ala | Asp |
|     | 20  |     | 25  |     | 30  |     |     |     |     |     |     |     |     |     |     |
| Ser | Gln | Asn | Leu | Arg | Gln | Glu | Leu | Gln | Lys | Thr | Arg | Gln | Lys | Ala | Gln |
|     | 35  |     | 40  |     | 45  |     |     |     |     |     |     |     |     |     |     |
| Glu | Leu | Ala | Val | Ser | Thr | Cys | Ala | Arg | Leu | Thr | Ala | Val | Leu | Arg | Asp |
|     | 50  |     | 55  |     | 60  |     |     |     |     |     |     |     |     |     |     |

Arg Gly Leu Ala Ala Asp Glu Arg Ala Glu Phe Glu Arg Leu Trp Val  
65 70 75 80  
Ala Phe Ser Gly Cys Leu Asp Leu Leu Glu Ala Asp Met Arg Arg Ser  
85 90 95  
Leu Glu Leu Gly Ala Ala Phe Pro Leu His Ala Pro Arg Arg Pro Leu  
100 105 110  
Val Arg Thr Gly Val Ala Gly Ala Ser Ser Gly Val Ala Ala Arg Ala  
115 120 125  
Leu Ser Thr Arg Ser Leu Arg Leu Glu Ala Glu Gly Asp Phe Asp Val  
130 135 140  
Ala Asp Leu Arg Glu Leu Glu Arg Glu Val Leu Gln Val Gly Glu Met  
145 150 155 160  
Ile Asp Asn Met Glu Met Lys Val Asn Val Pro Arg Trp Thr Val Gln  
165 170 175  
Ala Arg Gln Ala Ala Gly Ala Glu Leu Leu Ser Thr Val Ser Ala Gly  
180 185 190  
Pro Ser Ser Val Val Ser Leu Gln Glu Arg Gly Gly Gly Cys Asp Pro  
195 200 205  
Arg Lys Ala Leu Ala Ala Ile Leu Phe Gly Ala Val Leu Leu Ala Ala  
210 215 220  
Val Ala Leu Ala Val Cys Val Ala Lys Leu Ser  
225 230 235

&lt;210&gt; 2291

&lt;211&gt; 628

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2291

|     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| Met | Leu | Ser | Cys | Leu | Lys | Glu | Glu | Met | Pro | Pro | Gln | Glu | Leu | Thr | Arg |
| 1   |     |     |     | 5   |     |     |     |     | 10  |     |     |     |     | 15  |     |
| Arg | Leu | Ala | Thr | Val | Ile | Thr | His | Val | Asp | Glu | Ile | Met | Gln | Gln | Glu |
|     |     |     |     | 20  |     |     |     | 25  |     |     |     |     |     | 30  |     |
| Val | Arg | Pro | Leu | Met | Ala | Val | Glu | Ile | Ile | Glu | Gln | Leu | His | Arg | Gln |
|     |     |     |     | 35  |     |     |     | 40  |     |     |     |     |     | 45  |     |
| Phe | Ala | Ile | Leu | Ser | Gly | Gly | Arg | Gly | Glu | Asp | Gly | Ala | Pro | Ile | Ile |
|     |     |     |     | 50  |     |     |     | 55  |     |     |     |     |     | 60  |     |
| Thr | Phe | Pro | Glu | Phe | Ser | Gly | Phe | Lys | His | Ile | Pro | Asp | Glu | Asp | Phe |
|     |     |     |     | 65  |     |     |     | 70  |     |     |     |     |     | 75  |     |
| Leu | Asn | Val | Met | Thr | Tyr | Leu | Thr | Ser | Ile | Pro | Ser | Val | Glu | Ala | Ala |
|     |     |     |     | 85  |     |     |     | 90  |     |     |     |     |     | 95  |     |
| Ser | Ile | Gly | Phe | Ile | Val | Val | Ile | Asp | Arg | Arg | Arg | Asp | Lys | Trp | Ser |
|     |     |     |     | 100 |     |     |     | 105 |     |     |     |     |     | 110 |     |
| Ser | Val | Lys | Ala | Ser | Leu | Thr | Arg | Ile | Ala | Val | Ala | Phe | Pro | Gly | Asn |
|     |     |     |     | 115 |     |     |     | 120 |     |     |     |     |     | 125 |     |
| Leu | Gln | Leu | Ile | Phe | Ile | Leu | Arg | Pro | Ser | Arg | Phe | Ile | Gln | Arg | Thr |
|     |     |     |     | 130 |     |     |     | 135 |     |     |     |     |     | 140 |     |
| Phe | Thr | Asp | Ile | Gly | Ile | Lys | Tyr | Tyr | Arg | Asn | Glu | Phe | Lys | Thr | Lys |
|     |     |     |     | 145 |     |     |     | 150 |     |     |     |     |     | 155 |     |
| Val | Pro | Ile | Ile | Met | Val | Asn | Ser | Val | Ser | Asp | Leu | His | Gly | Tyr | Ile |
|     |     |     |     | 165 |     |     |     | 170 |     |     |     |     |     | 175 |     |
| Asp | Lys | Ser | Gln | Leu | Thr | Arg | Glu | Leu | Gly | Gly | Thr | Leu | Glu | Tyr | Arg |
|     |     |     |     | 180 |     |     |     | 185 |     |     |     |     |     | 190 |     |
| His | Gly | Gln | Trp | Val | Asn | His | Arg | Thr | Ala | Ile | Glu | Asn | Phe | Ala | Leu |
|     |     |     |     | 195 |     |     |     | 200 |     |     |     |     |     | 205 |     |
| Thr | Leu | Lys | Thr | Thr | Ala | Gln | Met | Leu | Gln | Thr | Phe | Gly | Ser | Cys | Leu |
|     |     |     |     | 210 |     |     |     | 215 |     |     |     |     |     | 220 |     |



Ala Thr Ala Glu Leu Pro Arg Ser Met Leu Ser Thr Glu Asp Leu Leu  
225 230 235 240  
Met Ser His Thr Arg Gln Arg Asp Lys Leu Gln Asp Glu Leu Lys Leu  
245 250 255  
Leu Gly Lys Gln Gly Thr Thr Leu Leu Ser Cys Ile Gln Glu Pro Ala  
260 265 270  
Thr Lys Cys Pro Asn Ser Lys Leu Asn Leu Asn Gln Leu Glu Asn Val  
275 280 285  
Thr Thr Met Glu Arg Leu Leu Val Gln Leu Asp Glu Thr Glu Lys Ala  
290 295 300  
Phe Ser His Phe Trp Ser Glu His His Leu Lys Leu Asn Gln Cys Leu  
305 310 315 320  
Gln Leu Gln His Phe Glu His Asp Phe Cys Lys Ala Lys Leu Ala Leu  
325 330 335  
Asp Asn Leu Leu Glu Glu Gln Ala Glu Phe Thr Gly Ile Gly Asp Ser  
340 345 350  
Val Met His Val Glu Gln Leu Leu Lys Glu His Lys Lys Leu Glu Glu  
355 360 365  
Lys Ser Gln Glu Pro Leu Glu Lys Ala Gln Leu Leu Ala Leu Val Gly  
370 375 380  
Asp Gln Leu Ile Gln Ser His His Tyr Ala Ala Asp Ala Ile Arg Pro  
385 390 395 400  
Arg Cys Val Glu Leu Arg His Leu Cys Asp Asp Phe Ile Asn Gly Asn  
405 410 415  
Lys Lys Lys Trp Asp Ile Leu Gly Lys Ser Leu Glu Phe His Arg Gln  
420 425 430  
Leu Asp Lys Val Ser Gln Trp Cys Glu Ala Gly Ile Tyr Leu Leu Ala  
435 440 445  
Ser Gln Ala Val Asp Lys Cys Gln Ser Arg Glu Gly Val Asp Ile Ala

450                      455                      460  
Leu Asn Asp Ile Ala Thr Phe Leu Gly Thr Val Lys Glu Tyr Pro Leu  
465                      470                      475                      480  
Leu Ser Pro Lys Glu Phe Tyr Asn Glu Phe Glu Leu Leu Leu Thr Leu  
                    485                      490                      495  
Asp Ala Lys Ala Lys Ala Gln Lys Val Leu Gln Arg Leu Asp Asp Val  
                    500                      505                      510  
Gln Glu Ile Phe His Lys Arg Gln Val Ser Leu Met Lys Leu Ala Ala  
                    515                      520                      525  
Lys Gln Thr Arg Pro Val Gln Pro Val Ala Pro His Pro Glu Ser Ser  
                    530                      535                      540  
Pro Lys Trp Val Ser Ser Lys Thr Ser Gln Pro Ser Thr Ser Val Pro  
545                      550                      555                      560  
Leu Ala Arg Pro Leu Arg Thr Ser Glu Glu Pro Tyr Thr Glu Thr Glu  
                    565                      570                      575  
Leu Asn Ser Arg Gly Lys Glu Asp Asp Glu Thr Lys Phe Glu Val Lys  
                    580                      585                      590  
Ser Glu Glu Ile Phe Glu Ser His His Glu Arg Gly Asn Pro Glu Leu  
                    595                      600                      605  
Glu Gln Gln Ala Arg Leu Gly Asp Leu Ser Pro Arg Arg Tyr Ser Ser  
                    610                      615                      620  
Gln Tyr Phe Lys  
625

&lt;210&gt; 2292

&lt;211&gt; 160

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2292

Met Ala Phe Leu Met Lys Ser Met Ile Ser Asn Gln Val Lys Asn Leu  
1 5 10 15  
Gly Phe Gly Gly Gly Ser Glu Glu Asn Lys Glu Glu Gly Gly Ala Ser  
20 25 30  
Asp Pro Ala Ala Ala Gln Gly Met Thr Arg Glu Glu Tyr Glu Glu Tyr  
35 40 45  
Gln Lys Gln Met Ile Glu Glu Lys Met Glu Arg Asp Ala Ala Phe Thr  
50 55 60  
Gln Lys Lys Ala Glu Arg Ala Cys Leu Arg Val His Leu Arg Glu Lys  
65 70 75 80  
Tyr Arg Leu Pro Lys Ser Glu Met Asp Glu Asn Gln Ile Gln Met Ala  
85 90 95  
Gly Asp Asp Val Asp Leu Pro Glu Asp Leu Arg Lys Met Val Asp Glu  
100 105 110  
Asp Gln Glu Glu Glu Glu Asp Lys Asp Ser Ile Leu Gly Gln Ile Gln  
115 120 125  
Asn Leu Gln Asn Met Asp Leu Asp Thr Ile Lys Glu Lys Ala Gln Ala  
130 135 140  
Thr Phe Thr Glu Ile Lys Gln Thr Ala Glu Gln Lys Cys Ser Val Met  
145 150 155 160

&lt;210&gt; 2293

&lt;211&gt; 233

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2293

|     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| Met | Glu | Gly | Cys | Pro | Pro | Gly | Leu | Trp | Leu | Ala | Leu | Gly | Val | Arg | Val |
| 1   |     |     |     | 5   |     |     |     |     | 10  |     |     |     |     | 15  |     |
| Ser | Gly | Ala | Pro | Pro | Ala | Val | Ser | Pro | Arg | Gln | Ser | His | Gly | Gly | Ala |
|     |     |     | 20  |     |     |     |     | 25  |     |     |     |     | 30  |     |     |
| Gly | Ala | Trp | Thr | Leu | Ser | His | Pro | Gly | Glu | Pro | Leu | Ser | His | Arg | Leu |
|     |     | 35  |     |     |     | 40  |     |     |     |     | 45  |     |     |     |     |
| Pro | Gly | Leu | Gln | Pro | Pro | His | Ala | Ser | Pro | Arg | Leu | Val | Leu | Gly | Pro |
|     | 50  |     |     |     |     | 55  |     |     |     |     | 60  |     |     |     |     |
| Gly | Pro | Pro | Leu | Ser | Lys | Ala | Asp | Phe | Pro | Ser | Phe | His | Asp | Lys | Asp |
|     | 65  |     |     |     | 70  |     |     |     |     | 75  |     |     |     | 80  |     |
| Ala | Gln | Pro | Arg | Phe | Pro | Gly | Ala | Leu | Ala | Arg | Glu | Ile | Ala | Gly | Cys |
|     |     |     | 85  |     |     |     |     | 90  |     |     |     |     | 95  |     |     |
| Ile | Pro | Thr | Pro | Ala | Gly | Thr | Cys | Ala | Pro | Pro | Gly | Gln | Gly | Leu | Pro |
|     |     | 100 |     |     |     |     |     | 105 |     |     |     |     | 110 |     |     |
| Val | Pro | Phe | Arg | Gly | Ser | Pro | Ala | Ala | Ser | Thr | Gly | Arg | Lys | Arg | Arg |
|     |     | 115 |     |     |     |     |     | 120 |     |     |     |     | 125 |     |     |
| Ser | Ala | Glu | Arg | Thr | Asn | Gly | Ala | Asp | Pro | Arg | Arg | Leu | Gly | Ala | Gly |
|     | 130 |     |     |     |     | 135 |     |     |     |     |     | 140 |     |     |     |
| Arg | Gly | Gly | Ala | Glu | Pro | Pro | Arg | Leu | Gln | Leu | Ala | Gly | Thr | Arg | Gly |
|     | 145 |     |     |     | 150 |     |     |     |     | 155 |     |     |     | 160 |     |
| Arg | Ala | Ala | Gly | Leu | Gly | Gly | Ala | His | Ser | Ala | Thr | Asp | Arg | Pro | Arg |
|     |     |     | 165 |     |     |     |     | 170 |     |     |     |     | 175 |     |     |
| Arg | Leu | Cys | Arg | Pro | Leu | Pro | Val | Ser | Arg | Gly | Gly | Ser | Arg | Gln | Glu |
|     |     | 180 |     |     |     |     |     | 185 |     |     |     |     | 190 |     |     |
| Ala | Glu | Gly | Thr | Pro | Pro | Ala | Pro | Gly | Gln | Ala | Ala | Arg | Ala | Ala | Asp |
|     |     | 195 |     |     |     |     |     | 200 |     |     |     |     | 205 |     |     |
| Pro | Ser | Arg | Glu | Gly | Pro | Trp | Ala | Asp | Glu | Pro | Arg | Val | Pro | Gln | Pro |
|     | 210 |     |     |     |     |     | 215 |     |     |     |     |     | 220 |     |     |

Trp Ser Arg Thr Thr Arg Ser Arg Arg

225

230

<210> 2294

<211> 229

<212> PRT

<213> Homo sapiens

<400> 2294

Met Ser Ser Leu Ala Tyr Gly Thr Leu Gly Asp Leu Ser Gln Tyr Lys

1

5

10

15

Glu Val Arg Leu Ala Ser Trp Lys Ser Glu Pro Gln Gly Ala Ser Phe

20

25

30

Leu Leu Cys Arg Val Gln Ser Gly Pro Gly Ser Gly Cys Ser Ala Leu

35

40

45

Val Phe Cys Gly Ser Arg Cys Pro Leu Leu Phe Val Ser Gly Asn Met

50

55

60

Ala Ser Gly Val Ala Val Ser Asp Gly Val Ile Lys Val Phe Asn Asp

65

70

75

80

Met Lys Val Arg Lys Ser Ser Thr Pro Glu Glu Val Lys Lys Arg Lys

85

90

95

Lys Ala Val Leu Phe Cys Leu Ser Glu Asp Lys Lys Asn Ile Ile Leu

100

105

110

Glu Glu Gly Lys Glu Ile Leu Val Gly Asp Val Gly Gln Thr Val Asp

115

120

125

Asp Pro Tyr Ala Thr Phe Val Lys Met Leu Pro Asp Lys Asp Cys Arg

130

135

140

Tyr Ala Leu Tyr Asp Ala Thr Tyr Glu Thr Lys Glu Ser Lys Lys Glu

145                      150                      155                      160  
Asp Leu Val Phe Ile Phe Trp Ala Pro Glu Ser Ala Pro Leu Lys Ser  
                         165                      170                      175  
Lys Met Ile Tyr Ala Ser Ser Lys Asp Ala Ile Lys Lys Lys Leu Thr  
                         180                      185                      190  
Gly Ile Lys His Glu Leu Gln Ala Asn Cys Tyr Glu Glu Val Lys Asp  
                         195                      200                      205  
Arg Cys Thr Leu Ala Glu Lys Leu Gly Gly Ser Ala Val Ile Ser Leu  
                         210                      215                      220  
Glu Gly Lys Pro Leu  
225

<210> 2295

<211> 138

<212> PRT

<213> Homo sapiens

<400> 2295

Met Val Gly Ala Gly Asp Asp Gly Ala Pro Gly Val Gly Met Arg Lys  
1                      5                      10                      15  
Glu Pro Arg Asn Gly Tyr Ile Leu Glu Thr Glu Leu Thr Gly Leu Gly  
                         20                      25                      30  
Ser Glu Leu Asn Leu Trp Glu Glu Gly Glu Ile Glu Ala Gln Leu Ala  
                         35                      40                      45  
Phe Arg Gly Asp Val Ala Asn Lys Val Pro Gly Gly Ile Val Tyr Pro  
                         50                      55                      60  
His Glu Gly Cys Arg Gly Lys Ser Arg Val Ser Arg Arg Val Glu Met  
65                      70                      75                      80

Ser Gly Asp Leu Leu Gly His Ile Met Ile Glu Lys Val Gly Leu Gly  
                             85                            90                            95  
 Arg Gly Trp Trp Leu Met Ser Val Ile Pro Ala Leu Trp Glu Ala Glu  
                             100                            105                            110  
 Val Asp His Leu Arg Ser Gly Val Gly Asp Gln Pro Gly Gln His Gly  
                             115                            120                            125  
 Glu Thr Pro Ser Leu Leu Lys Ile Gln Asn  
                             130                            135

<210> 2296

<211> 225

<212> PRT

<213> Homo sapiens

<400> 2296

Met Thr Cys Asn Ser Arg Trp Trp Ile Cys Ser Lys Ala Ser Ile Pro  
     1                            5                            10                            15  
 Thr Pro Ser Lys Gly Gln Val Ser Ser Pro Ala Ser Glu Ile Arg Leu  
                             20                            25                            30  
 Trp Asp Pro Cys Leu Gly Gly Gly Leu His Ala Pro Ala Thr Ser Ala  
                             35                            40                            45  
 Gly Ala Asp Ser Arg Thr Pro Trp His Phe Leu Arg Thr Arg Ala Trp  
                             50                            55                            60  
 Asp Gly Pro Ser Ala Pro Trp Tyr Ala Leu Pro Ser Phe Gln Leu Pro  
     65                            70                            75                            80  
 Cys Pro Leu Thr Leu Gly Ser Pro Pro Pro His Gln Cys Arg Val Leu  
                             85                            90                            95  
 Val Pro Thr Ser Ser Phe Leu Gln Pro Gln Thr Ala Ser Gly Ser Ser

100 105 110  
 Cys Pro Ser Pro Ser Gly Thr Pro Ala Pro Gly Cys Pro Leu Ser Leu  
 115 120 125  
 Pro Pro Met Pro Arg Ala Pro Pro Ala Ser Ala Gly Gln Ala Phe Arg  
 130 135 140  
 Thr Leu Pro Pro Thr Gln Phe Tyr Asn Pro Ala Pro Ser Pro Gly Asn  
 145 150 155 160  
 Pro Thr His Gln Pro Arg Pro Ala Pro Pro Pro Phe Pro Gly Gly Ser  
 165 170 175  
 Pro Gly Met Leu Arg Val Gly Gly Gly Ala Arg Leu Asp Ala Ser Cys  
 180 185 190  
 Gly Ser Pro Leu Gln Thr Trp Leu Ala Pro Ala Ala Thr Glu Thr Thr  
 195 200 205  
 Met Ala Lys Asn Leu Ile Gly Ser Gln Gly Leu Thr Arg Gly Gly Lys  
 210 215 220  
 Gln  
 225

&lt;210&gt; 2297

&lt;211&gt; 248

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2297

Met Trp Pro Gly Asn Ala Trp Arg Ala Ala Leu Phe Trp Val Pro Arg  
 1 5 10 15  
 Gly Arg Arg Ala Gln Ser Ala Leu Ala Gln Leu Arg Gly Ile Leu Glu  
 20 25 30



Gly Glu Leu Glu Gly Ile Arg Gly Ala Gly Thr Trp Lys Ser Glu Arg  
 35 40 45  
 Val Ile Thr Ser Arg Gln Gly Pro His Ile Arg Val Asp Gly Val Ser  
 50 55 60  
 Gly Gly Pro Gly Thr Val Ile Phe Pro Gly Leu Pro Ser Pro His Leu  
 65 70 75 80  
 Ser Cys Cys Ile His Leu Leu Ser Phe Thr Ser Gly Ile Leu Asn Phe  
 85 90 95  
 Cys Ala Asn Asn Tyr Leu Gly Leu Ser Ser His Pro Glu Val Ile Gln  
 100 105 110  
 Ala Gly Leu Gln Ala Leu Glu Glu Phe Gly Ala Gly Leu Ser Ser Val  
 115 120 125  
 Arg Phe Ile Cys Gly Thr Gln Ser Ile His Lys Asn Leu Glu Ala Lys  
 130 135 140  
 Ile Ala Arg Phe His Gln Arg Glu Asp Ala Ile Leu Tyr Pro Ser Cys  
 145 150 155 160  
 Tyr Asp Ala Asn Ala Gly Leu Phe Glu Ala Leu Leu Thr Pro Glu Asp  
 165 170 175  
 Ala Val Leu Ser Asp Glu Leu Asn His Ala Ser Ile Ile Asp Gly Ile  
 180 185 190  
 Arg Leu Cys Lys Ala His Lys Tyr Arg Tyr Arg His Leu Asp Met Ala  
 195 200 205  
 Asp Leu Glu Ala Lys Leu Gln Glu Ala Gln Lys His Arg Leu Arg Leu  
 210 215 220  
 Val Ala Thr Asp Gly Ala Phe Phe His Gly Trp Arg His Arg Thr Pro  
 225 230 235 240  
 Ala Gly Asp Leu Leu Pro Arg Leu  
 245

&lt;210&gt; 2298

&lt;211&gt; 221

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2298

Met Gly Ser Ala Leu Arg Gly Leu Gly Ser Ala Thr Phe Ser Ser Ser

1 5 10 15

Pro Val Thr His Ser Ser Arg Val Gly Gly Val Leu Pro Ala Pro Pro

20 25 30

Arg Gly Leu Gly Ile Ser Pro Ser Pro Cys Pro Gly Asp Ser Leu Ala

35 40 45

Leu Ser Arg Thr Ala Ser Leu Leu Gly Leu Ser Leu Gly Thr Gln Trp

50 55 60

Thr Pro Lys Ser Arg Pro Ala Pro Thr Thr Gly Pro Ala Ser Leu Cys

65 70 75 80

Leu Pro Gln Leu Ala Trp Val Leu Ala Trp Val Arg Ile Trp Lys Leu

85 90 95

Leu Ala Gly Leu Asn Gln Ala Leu Leu Ser Ser Ser Arg Ala Leu Ser

100 105 110

His Arg Arg Gln Arg Pro Ala Ala Ser Arg Pro His Cys Gln Gln Cys

115 120 125

Pro Trp Pro Ser Glu Pro Arg Arg Ser Ser Thr Pro Ser Arg Pro Ser

130 135 140

Ser Thr Pro Pro Arg Pro Ala Gly Gln Gly Gln Ala Leu Pro Gln Ile

145 150 155 160

Leu Ile Gly Arg Glu Ala Leu Leu Thr Phe Pro Pro Gly Gly Arg Gly

165 170 175

Trp Ser Glu Ser Pro His Ser Arg Glu Thr His Arg Ser Pro Leu Asn  
 180 185 190  
 Phe Ala Asp Ala His Leu Glu Asn Gly Leu Ser Cys Thr Arg Pro Ser  
 195 200 205  
 His Thr Thr Ala Leu Gln Ala Asp Gly Met Phe Gln Leu  
 210 215 220

<210> 2299

<211> 101

<212> PRT

<213> Homo sapiens

<400> 2299

Met Leu Pro Arg Ser Gln Ser Leu Cys Tyr Ser Leu Pro Gln Ala Ile  
 1 5 10 15  
 Leu Ser Pro Trp Pro Pro Lys Val Leu Ser Leu Gln Val Ser Thr Thr  
 20 25 30  
 Val Ala Ser His Ala Leu Val Leu Arg Ser Arg Ile Phe Leu Phe Gly  
 35 40 45  
 Ala Phe Thr Ile Ser Phe Arg Leu Gly Asp Arg Glu Pro Thr Lys Gln  
 50 55 60  
 Pro Phe Arg Gly Trp Lys Lys Ser Leu Glu Lys Glu Leu Cys Gly Phe  
 65 70 75 80  
 Arg Asn Phe Ser Arg Lys Ser Ser Arg Ala Glu Lys Glu Asn Leu Pro  
 85 90 95  
 Asn Gly Arg Val Tyr  
 100

&lt;210&gt; 2300

&lt;211&gt; 277

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2300

Met Glu Glu Asn Gln Arg Val Ala Arg Arg Arg Arg Phe Pro Phe Val

1 5 10 15

Arg Glu Arg Ser Asp Ser Thr Gly Ser Ser Ser Val Tyr Phe Thr Ala

20 25 30

Ser Ser Gly Ala Thr Phe Thr Asp Ala Glu Ser Glu Gly Gly Tyr Thr

35 40 45

Thr Ala Asn Ala Glu Ser Asp Asn Glu Arg Asp Ser Asp Lys Glu Ser

50 55 60

Glu Asp Gly Glu Asp Glu Val Ser Cys Glu Thr Val Lys Met Gly Arg

65 70 75 80

Lys Asp Ser Leu Asp Leu Glu Glu Glu Ala Ala Ser Gly Ala Ser Ser

85 90 95

Ala Leu Glu Ala Gly Gly Ser Ser Gly Leu Glu Asp Val Leu Pro Leu

100 105 110

Leu Gln Gln Ala Asp Glu Leu His Arg Gly Asp Glu Gln Gly Lys Arg

115 120 125

Glu Gly Phe Gln Leu Leu Leu Asn Asn Lys Leu Val Tyr Gly Ser Arg

130 135 140

Gln Asp Phe Leu Trp Arg Leu Ala Arg Ala Tyr Ser Asp Met Cys Glu

145 150 155 160

Leu Thr Glu Glu Val Ser Glu Lys Lys Ser Tyr Ala Leu Asp Gly Lys

165 170 175

Glu Glu Ala Glu Ala Ala Leu Glu Lys Gly Asp Glu Ser Ala Asp Cys  
                     180                    185                    190  
 His Leu Trp Tyr Ala Val Leu Cys Gly Gln Leu Ala Glu His Glu Ser  
                     195                    200                    205  
 Ile Gln Arg Arg Ile Gln Ser Gly Phe Ser Phe Lys Glu His Val Asp  
                     210                    215                    220  
 Lys Ala Ile Ala Leu Gln Pro Glu Asn Pro Met Ala His Phe Leu Leu  
                     225                    230                    235                    240  
 Gly Arg Trp Cys Tyr Gln Val Ser His Leu Ser Trp Leu Glu Lys Lys  
                                     245                    250                    255  
 Leu Leu Gln Pro Cys Leu Lys Ala Leu Ser Val Pro Leu Trp Lys Met  
                     260                    265                    270  
 Pro Ser Arg Ala Ser  
                     275

<210> 2301

<211> 330

<212> PRT

<213> Homo sapiens

<400> 2301

Met Arg Arg Asp Pro Ala Pro Gly Phe Ser Met Leu Leu Phe Gly Val  
           1                    5                    10                    15  
 Leu Leu Ala Cys Tyr Ser Pro Ser Leu Lys Ser Val Gln Asp Gln Ala  
                     20                    25                    30  
 Tyr Lys Ala Pro Val Val Val Glu Gly Lys Val Gln Gly Leu Val Pro  
                     35                    40                    45  
 Ala Gly Gly Ser Ser Ser Asn Ser Thr Arg Glu Pro Pro Ala Ser Gly

出証特 2 0 0 4 - 3 0 5 9 6 6 0

Cys Leu Glu Lys Leu Pro Leu Arg Leu Tyr Met Pro Asp Pro Lys Gln  
290 295 300  
Ser Val Leu Trp Asp Thr Pro Gly Thr Gly Val Ser Ser Ser Gln Trp  
305 310 315 320  
Ser Thr Ser Pro Ser Thr Leu Asp Leu Asn  
325 330

<210> 2302

<211> 113

<212> PRT

<213> Homo sapiens

<400> 2302

[illegible]

&lt;210&gt; 2303

&lt;211&gt; 215

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2303

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Met Gln Pro Pro Ala Leu Ser Ser Asn Ser Arg Val Arg Ile Thr Gln
  1             5             10             15
Pro Cys Leu Asp Asp Arg Cys Ser Glu Leu Ser Gly Ala Leu Pro Arg
      20             25             30
Ala Gln Arg Ser Arg Ala Val Pro Ile Pro Ala Arg Pro Arg Lys Arg
      35             40             45
Pro Ser Cys Arg Glu Ser Gly Lys Pro Arg Ala Gly Trp Val Ser Ala
      50             55             60
Gln Ser Pro Thr Thr Gly Trp Gly Gly Gly His Pro Gln Ser Thr Val
      65             70             75             80
Ser Gly Gly Arg Asn Arg Ala Leu Leu Ala Ser Val Arg Phe Arg Arg
      85             90             95
Arg Gln Arg Gly Tyr Leu Ala Trp Cys Gly Gly Arg Ala Gly Ala Val
      100            105            110
Pro Ala Glu Gly Pro Ala Val Cys Ala Gly His Ala Arg Gly His Ala
      115            120            125
Gly Arg Pro Ala Ala Ala Ala Pro Arg Lys Ala Ala Pro Ala Gly Ser
      130            135            140
Met Arg His Pro Ala Pro Gly Pro Asp Cys Pro Arg His Gln His Gln
      145            150            155            160

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Gly Gln Lys Gln Tyr Asn Ile His Val Gly Thr Ala Gly Ser Lys Asp  
 165 170 175  
 Lys Arg Pro Lys Ile Ser Gly Leu Arg Met Glu His Ser His Glu Pro  
 180 185 190  
 Ala His Asp Lys Thr His Pro Cys Phe Ser Gly Ser Arg Leu Tyr Val  
 195 200 205  
 Lys Ala Ser Cys Arg Gly Cys  
 210 215

<210> 2304

<211> 107

<212> PRT

<213> Homo sapiens

<400> 2304

Met Glu Leu Leu Asp Pro Asp Glu Leu Arg Gly Glu Ala Gly Tyr Tyr  
 1 5 10 15  
 Leu Thr Thr Trp Phe Gly Ala Leu His His Ile Ala His Tyr Gln Pro  
 20 25 30  
 Glu Thr Asp Arg Ala Pro Arg Gly Leu Ser Ser Glu Ala Arg Ala Ser  
 35 40 45  
 Leu His Gln Trp His Arg Arg Arg Thr Leu His Arg Lys Asp His Pro  
 50 55 60  
 Arg Ala Gln Val Thr Ala His Leu Ala Ala Ser Arg Arg Glu Gly Glu  
 65 70 75 80  
 Thr Trp Cys Pro Ser Asp Pro Ala Pro Thr Ser Pro His Arg Pro Thr  
 85 90 95  
 Cys Pro Leu Arg Ser His Gly Gln Lys Arg Leu

100

105

&lt;210&gt; 2305

&lt;211&gt; 127

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2305

Met Ile Leu Lys Lys Gly Pro His Phe Pro Gly Glu Ala Asp Pro Arg

1

5

10

15

Cys Val Val Gly Ser Pro Gly Ala Gly Asp Arg Arg Cys Ala Cys Ala

20

25

30

Ala Ala Gly Thr Gly Ala Ser Arg Leu Gly Val Ala Arg Gly Val Pro

35

40

45

Gly Gln Pro Gly Pro His Pro Gly Pro Leu Val Pro Cys Pro Ser Ser

50

55

60

Leu Pro Ile Leu Pro His Leu Pro Ser Thr Thr Val Ala Ala Ala Gly

65

70

75

80

Ser Ala Ser Ala Thr Gly Ala Ala Ala Arg Arg Cys Arg Cys Gly Ala

85

90

95

Cys Ala Leu Trp Thr Pro Cys Gly Ser Ala Arg Ser Ala Pro Trp Cys

100

105

110

Pro Ser Arg Arg Arg Ser Ser Thr Thr Ser Ser Ser Lys Cys Ser

115

120

125

&lt;210&gt; 2306

&lt;211&gt; 131

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2306

Met Val Ala Ala Tyr Ala Gly His Ile Asp Cys Val Arg Glu Leu Val  
1 5 10 15  
Leu Gln Gly Ala Asp Ile Asn Leu Gln Arg Glu Asp Gly Gly Thr Ala  
20 25 30  
Leu Leu Ala Ala Ser Gln Tyr Gly His Met Gln Val Val Glu Thr Leu  
35 40 45  
Leu Lys His Gly Ala Asn Ile His Asp Gln Leu Tyr Asp Gly Ala Thr  
50 55 60  
Ala Leu Phe Leu Ala Ala Gln Gly Gly Tyr Leu Asp Val Ile Arg Leu  
65 70 75 80  
Leu Leu Ala Ser Gly Ala Lys Val Asn Gln Pro Arg Thr Gly Gln Arg  
85 90 95  
Pro Cys Gly Ser Arg Pro Arg Trp Ala Thr Ala Arg Trp Cys Gly Cys  
100 105 110  
Cys Cys Cys Ala Glu Pro Thr Ala Thr Leu Arg Gly Thr Met Ala Gln  
115 120 125  
Gln His Tyr  
130

&lt;210&gt; 2307

&lt;211&gt; 190

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2307

Met Leu Phe Thr His Ala Ser Leu Thr Ile Met Thr Lys Ile Phe Phe  
 1 5 10 15  
 Leu Ala Cys Ile Leu Ser Gln Ser Val Gln Tyr Ile Gly Leu Lys Val  
 20 25 30  
 Leu Trp Lys Ser Leu Cys Arg Ser Ile Ile Cys Val Lys Lys Lys Lys  
 35 40 45  
 Lys Pro Lys Lys Gln Lys Lys Lys Thr Phe Asp Leu Ser Arg His Ile  
 50 55 60  
 Glu Ala Gln Leu Thr Ala Ser Phe Ala Gly Ile Trp Phe Tyr Phe Leu  
 65 70 75 80  
 Phe Arg Phe Ile Ile Asp Ser Thr Ser Ile Ser Leu Asp Cys Phe Phe  
 85 90 95  
 Val Ile Val Gly Gln Val Ser Ile Ser Ile Asn Ser Ile Leu Ser Leu  
 100 105 110  
 Asn Ser Ser Phe His Thr Ser Phe Asp Thr Leu Val Ala Leu Ser Phe  
 115 120 125  
 Ile Leu Leu Val Phe Val Leu Arg Gln Ser Leu Ala Leu Pro Leu Arg  
 130 135 140  
 Leu Glu Cys Ser Gly Thr Ile Thr Ala His Cys Ser Leu Tyr Leu Leu  
 145 150 155 160  
 Gly Pro Ser Ser Ala Leu Asp Ser Gly Met Pro Asn Ser Val Ala Gly  
 165 170 175  
 Thr Thr Ser Leu Thr Ile Leu Pro Gly Leu Val Leu Asn Pro  
 180 185 190

&lt;210&gt; 2308

&lt;211&gt; 180

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2308

Met Leu Glu Asp Pro Val Ala Leu Lys Ala Cys Leu Leu His Ile Cys

1 5 10 15

Leu Gln Ser Gln Thr Ser Gly Pro Gly Ala Val Ser Ser Leu Val Ser

20 25 30

Gly Ile Pro Val Ala Ser Met Phe Cys Val Cys Val Trp Cys Ala Pro

35 40 45

Ser Ser His Cys Leu Asn Ser Leu Lys Ser His Lys Gly Gly Leu Leu

50 55 60

Leu Glu Ile Trp Pro Pro Leu Ala Pro Pro Arg Ser Pro His Val Ser

65 70 75 80

Pro Thr Gly Ser Pro Gln Thr Thr Ser Glu Gly Leu Thr Cys Cys His

85 90 95

Ser Leu Leu Leu Pro Gln Ser Arg Val Met Arg Met Asp Gly Val Gln

100 105 110

Gly Phe Arg Trp Gly Leu Arg Arg Cys Pro Cys Trp Pro Cys Pro Ser

115 120 125

Trp Leu Ser Arg Pro Gly Phe Thr Val Gln Leu His Leu Tyr Ala Gly

130 135 140

Arg Gly Ala Asp Ser Ser Gly Thr Pro Trp Phe Trp Ile Pro Phe Leu

145 150 155 160

Gly Ser Leu Trp Arg Gln Pro Gly Phe Ser Gly Ala Ala Ser Gln Gln

165 170 175

Leu Ser Gln Gly

180

&lt;210&gt; 2309

&lt;211&gt; 1015

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2309

Met Ala Gln Gly Glu Ala Gln Trp Phe Gln Glu Ala Lys Asn Leu Asn

1 5 10 15

Glu Gln Leu Arg Ala Ala Tyr Thr Ser Ala Ser Phe Arg His Met Ser

20 25 30

Leu Leu Asp Ile Ser Ser Asp Leu Ala Thr Asp His Leu Leu Gly Cys

35 40 45

Asp Leu Ser Ile Ala Ser Lys His Ile Ser Lys Pro Val Gln Glu Pro

50 55 60

Leu Val Leu Pro Glu Val Phe Gly Asn Leu Asn Ser Val Met Cys Val

65 70 75 80

Glu Gly Glu Ala Gly Ser Gly Lys Thr Val Leu Leu Lys Lys Ile Ala

85 90 95

Phe Leu Trp Ala Ser Gly Cys Cys Pro Leu Leu Asn Arg Phe Gln Leu

100 105 110

Val Phe Tyr Leu Ser Leu Ser Ser Thr Arg Pro Asp Glu Gly Leu Ala

115 120 125

Ser Ile Ile Cys Asp Gln Leu Leu Glu Lys Glu Gly Ser Val Thr Glu

130 135 140

Met Cys Met Arg Asn Ile Ile Gln Gln Leu Lys Asn Gln Val Leu Phe

145 150 155 160

Leu Leu Asp Asp Tyr Lys Glu Ile Cys Ser Ile Pro Gln Val Ile Gly

165 170 175

Lys Leu Ile Gln Lys Asn His Leu Ser Arg Thr Cys Leu Leu Ile Ala  
 180 185 190  
 Val Arg Thr Asn Arg Ala Arg Asp Ile Arg Arg Tyr Leu Glu Thr Ile  
 195 200 205  
 Leu Glu Ile Lys Ala Phe Pro Phe Tyr Asn Thr Val Cys Ile Leu Arg  
 210 215 220  
 Lys Leu Phe Ser His Asn Met Thr Arg Leu Arg Lys Phe Met Val Tyr  
 225 230 235 240  
 Phe Gly Lys Asn Gln Ser Leu Gln Lys Ile Gln Lys Thr Pro Leu Phe  
 245 250 255  
 Val Ala Ala Ile Cys Ala His Trp Phe Gln Tyr Pro Phe Asp Pro Ser  
 260 265 270  
 Phe Asp Asp Val Ala Val Phe Lys Ser Tyr Met Glu Arg Leu Ser Leu  
 275 280 285  
 Arg Asn Lys Ala Thr Ala Glu Ile Leu Lys Ala Thr Val Ser Ser Cys  
 290 295 300  
 Gly Glu Leu Ala Leu Lys Gly Phe Phe Ser Cys Cys Phe Glu Phe Asn  
 305 310 315 320  
 Asp Asp Asp Leu Ala Glu Ala Gly Val Asp Glu Asp Glu Asp Leu Thr  
 325 330 335  
 Met Cys Leu Met Ser Lys Phe Thr Ala Gln Arg Leu Arg Pro Phe Tyr  
 340 345 350  
 Arg Phe Leu Ser Pro Ala Phe Gln Glu Phe Leu Ala Gly Met Arg Leu  
 355 360 365  
 Ile Glu Leu Leu Asp Ser Asp Arg Gln Glu His Gln Asp Leu Gly Leu  
 370 375 380  
 Tyr His Leu Lys Gln Ile Asn Ser Pro Ile Met Thr Val Ser Ala Tyr  
 385 390 395 400  
 Asn Asn Phe Leu Asn Tyr Val Ser Ser Leu Pro Ser Thr Lys Ala Gly

|   |     |     |
|---|-----|-----|
| 405   | 410 | 415 |
| Pro Lys Ile Val Ser His Leu Leu His Leu Val Asp Asn Lys Glu Ser |     |     |
| 420   | 425 | 430 |
| Leu Glu Asn Ile Ser Glu Asn Asp Asp Tyr Leu Lys His Gln Pro Glu |     |     |
| 435   | 440 | 445 |
| Ile Ser Leu Gln Met Gln Leu Leu Arg Gly Leu Trp Gln Ile Cys Pro |     |     |
| 450   | 455 | 460 |
| Gln Ala Tyr Phe Ser Met Val Ser Glu His Leu Leu Val Leu Ala Leu |     |     |
| 465   | 470 | 475 |
| Lys Thr Ala Tyr Gln Ser Asn Thr Val Ala Ala Cys Ser Pro Phe Val |     |     |
| 485   | 490 | 495 |
| Leu Gln Phe Leu Gln Gly Arg Thr Leu Thr Leu Gly Ala Leu Asn Leu |     |     |
| 500   | 505 | 510 |
| Gln Tyr Phe Phe Asp His Pro Glu Ser Leu Ser Leu Leu Arg Ser Ile |     |     |
| 515   | 520 | 525 |
| His Phe Pro Ile Arg Gly Asn Lys Thr Ser Pro Arg Ala His Phe Ser |     |     |
| 530   | 535 | 540 |
| Val Leu Glu Thr Cys Phe Asp Lys Ser Gln Val Pro Thr Ile Asp Gln |     |     |
| 545   | 550 | 555 |
| Asp Tyr Ala Ser Ala Phe Glu Pro Met Asn Glu Trp Glu Arg Asn Leu |     |     |
| 565   | 570 | 575 |
| Ala Glu Lys Glu Asp Asn Val Lys Ser Tyr Met Asp Met Gln Arg Arg |     |     |
| 580   | 585 | 590 |
| Ala Ser Pro Asp Leu Ser Thr Gly Tyr Trp Lys Leu Ser Pro Lys Gln |     |     |
| 595   | 600 | 605 |
| Tyr Lys Ile Pro Cys Leu Glu Val Asp Val Asn Asp Ile Asp Val Val |     |     |
| 610   | 615 | 620 |
| Gly Gln Asp Met Leu Glu Ile Leu Met Thr Val Phe Ser Ala Ser Gln |     |     |
| 625   | 630 | 635 |
|   |     | 640 |



|   |     |     |     |
|---|-----|-----|-----|
| Arg Ile Glu Leu His Leu Asn His Ser Arg Gly Phe Ile Glu Ser Ile |     |     |     |
| 645   | 650 | 655 |     |
| Arg Pro Ala Leu Glu Leu Ser Lys Ala Ser Val Thr Lys Cys Ser Ile |     |     |     |
| 660   | 665 | 670 |     |
| Ser Lys Leu Glu Leu Ser Ala Ala Glu Gln Glu Leu Leu Leu Thr Leu |     |     |     |
| 675   | 680 | 685 |     |
| Pro Ser Leu Glu Ser Leu Glu Val Ser Gly Thr Ile Gln Ser Gln Asp |     |     |     |
| 690   | 695 | 700 |     |
| Gln Ile Phe Pro Asn Leu Asp Lys Phe Leu Cys Leu Lys Glu Leu Ser |     |     |     |
| 705   | 710 | 715 | 720 |
| Val Asp Leu Glu Gly Asn Ile Asn Val Phe Ser Val Ile Pro Glu Glu |     |     |     |
| 725   | 730 | 735 |     |
| Phe Pro Asn Phe His His Met Glu Lys Leu Leu Ile Gln Ile Ser Ala |     |     |     |
| 740   | 745 | 750 |     |
| Glu Tyr Asp Pro Ser Lys Leu Val Lys Leu Ile Gln Asn Ser Pro Asn |     |     |     |
| 755   | 760 | 765 |     |
| Leu His Val Phe His Leu Lys Cys Asn Phe Phe Ser Asp Phe Gly Ser |     |     |     |
| 770   | 775 | 780 |     |
| Leu Met Thr Met Leu Val Ser Cys Lys Lys Leu Thr Glu Ile Lys Phe |     |     |     |
| 785   | 790 | 795 | 800 |
| Ser Asp Ser Phe Phe Gln Ala Val Pro Phe Val Ala Ser Leu Pro Asn |     |     |     |
| 805   | 810 | 815 |     |
| Phe Ile Ser Leu Lys Ile Leu Asn Leu Glu Gly Gln Gln Phe Pro Asp |     |     |     |
| 820   | 825 | 830 |     |
| Glu Glu Thr Ser Glu Lys Phe Ala Tyr Ile Leu Gly Ser Leu Ser Asn |     |     |     |
| 835   | 840 | 845 |     |
| Leu Glu Glu Leu Ile Leu Pro Thr Gly Asp Gly Ile Tyr Arg Val Ala |     |     |     |
| 850   | 855 | 860 |     |
| Lys Leu Ile Ile Gln Gln Cys Gln Gln Leu His Cys Leu Arg Val Leu |     |     |     |

865                      870                      875                      880  
Ser Phe Phe Lys Thr Leu Asn Asp Asp Ser Val Val Glu Ile Ala Lys  
                                 885                      890                      895  
Val Ala Ile Ser Gly Gly Phe Gln Lys Leu Glu Asn Leu Lys Leu Ser  
                                 900                      905                      910  
Ile Asn His Lys Ile Thr Glu Glu Gly Tyr Arg Asn Phe Phe Gln Ala  
                                 915                      920                      925  
Leu Asp Asn Met Pro Asn Leu Gln Glu Leu Asp Ile Ser Arg His Phe  
                                 930                      935                      940  
Thr Glu Cys Ile Lys Ala Gln Ala Thr Thr Val Lys Ser Leu Ser Gln  
945                                   950                                   955                                   960  
Cys Val Leu Arg Leu Pro Arg Leu Ile Arg Leu Asn Met Leu Ser Trp  
                                 965                                   970                                   975  
Leu Leu Asp Ala Asp Asp Ile Ala Leu Leu Asn Val Met Lys Glu Arg  
                                 980                                   985                                   990  
His Pro Gln Ser Lys Tyr Leu Thr Ile Leu Gln Lys Trp Ile Leu Pro  
                                 995                                   1000                                   1005  
Phe Ser Pro Ile Ile Gln Lys  
                                 1010                                   1015

&lt;210&gt; 2310

&lt;211&gt; 259

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2310

Met Gln Phe Leu His Lys Leu Ile Leu Asn His Asn Pro Leu Thr Thr

1

5

10

15

|     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| Val | Glu | Asp | Pro | Tyr | Leu | Phe | Lys | Leu | Pro | Ala | Leu | Lys | Tyr | Leu | Asp |
|     |     |     | 20  |     |     |     |     | 25  |     |     |     |     | 30  |     |     |
| Met | Gly | Thr | Thr | Leu | Val | Pro | Leu | Thr | Thr | Leu | Lys | Asn | Ile | Leu | Met |
|     |     |     | 35  |     |     |     |     | 40  |     |     |     |     | 45  |     |     |
| Met | Thr | Val | Glu | Leu | Glu | Lys | Leu | Ile | Leu | Pro | Ser | His | Met | Ala | Cys |
|     |     |     | 50  |     |     |     |     | 55  |     |     |     |     | 60  |     |     |
| Cys | Leu | Cys | Gln | Phe | Lys | Asn | Ser | Ile | Glu | Ala | Val | Cys | Lys | Thr | Val |
|     |     |     | 65  |     |     |     |     | 70  |     |     |     |     | 75  |     | 80  |
| Lys | Leu | His | Cys | Asn | Ser | Ala | Cys | Leu | Thr | Asn | Thr | Thr | His | Cys | Pro |
|     |     |     |     | 85  |     |     |     |     |     | 90  |     |     |     | 95  |     |
| Glu | Glu | Ala | Ser | Val | Gly | Asn | Pro | Glu | Gly | Ala | Phe | Met | Lys | Val | Leu |
|     |     |     | 100 |     |     |     |     |     |     | 105 |     |     |     | 110 |     |
| Gln | Ala | Arg | Lys | Asn | Tyr | Thr | Ser | Thr | Glu | Leu | Ile | Val | Glu | Pro | Glu |
|     |     |     | 115 |     |     |     |     |     |     | 120 |     |     |     | 125 |     |
| Glu | Pro | Ser | Asp | Ser | Ser | Gly | Ile | Asn | Leu | Ser | Gly | Phe | Gly | Ser | Glu |
|     |     |     | 130 |     |     |     |     |     |     | 135 |     |     |     | 140 |     |
| Gln | Leu | Asp | Thr | Asn | Asp | Glu | Ser | Asp | Phe | Ile | Ser | Thr | Leu | Ser | Tyr |
|     |     |     | 145 |     |     |     |     |     |     | 150 |     |     |     | 155 | 160 |
| Ile | Leu | Pro | Tyr | Phe | Ser | Ala | Val | Asn | Leu | Asp | Val | Lys | Ser | Leu | Leu |
|     |     |     |     | 165 |     |     |     |     |     | 170 |     |     |     | 175 |     |
| Leu | Pro | Leu | Ile | Lys | Leu | Pro | Thr | Thr | Gly | Asn | Ser | Leu | Ala | Lys | Ile |
|     |     |     |     | 180 |     |     |     |     |     | 185 |     |     |     | 190 |     |
| Gln | Thr | Val | Gly | Gln | Asn | Arg | Gln | Arg | Val | Lys | Arg | Val | Leu | Met | Gly |
|     |     |     | 195 |     |     |     |     |     |     | 200 |     |     |     | 205 |     |
| Pro | Arg | Ser | Ile | Gln | Lys | Arg | His | Phe | Lys | Glu | Val | Gly | Arg | Gln | Ser |
|     |     |     | 210 |     |     |     |     |     |     | 215 |     |     |     | 220 |     |
| Ile | Arg | Arg | Glu | Gln | Gly | Ala | Gln | Ala | Ser | Val | Glu | Asn | Ala | Ala | Glu |
|     |     |     | 225 |     |     |     |     |     |     | 230 |     |     |     | 235 | 240 |
| Glu | Lys | Arg | Leu | Gly | Ser | Pro | Ala | Pro | Thr | Glu | Glu | Glu | Glu | Ser | Glu |

245

250

255

Ala Leu Pro

&lt;210&gt; 2311

&lt;211&gt; 110

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2311

Met Ala Thr Ser Asp Pro Pro Gln Ser Leu Asp Thr Ser Leu Phe Phe

1

5

10

15

Gly Thr Val Ala Met Lys Asn Ser Ser Pro Glu Pro Gln Ala Leu Thr

20

25

30

Pro Ser Ser Lys Leu Thr Val Asp Thr Asp Ala Leu Thr Pro Ser Ser

35

40

45

Thr Leu Cys Glu Asn Ser Val Ser Glu Leu Leu Thr Pro Thr Lys Ala

50

55

60

Glu Trp Asn Val His Pro Asp Ser Asp Phe Phe Gly Gln Glu Gly Glu

65

70

75

80

Thr Gln Phe Gly Phe Pro Asn Ala Ala Gly Asn His Gly Ser Gln Lys

85

90

95

Glu Thr Asp Leu Ile Thr Val Thr Gly Ser Ser Phe Leu Val

100

105

110

&lt;210&gt; 2312

&lt;211&gt; 105

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2312

Met Lys Met Ser Phe Phe Glu Arg Leu Arg Ser Ala Thr Trp Lys Pro  
1 5 10 15  
Val Pro Asp Ser His Gln Gly Pro Ala Phe Tyr Cys Gly Thr Leu Lys  
20 25 30  
Ala Gly Pro Ser Pro Lys Asp Thr Phe Leu Ser Leu Leu Asn Trp Asn  
35 40 45  
Tyr Gly Phe Val Phe Ile Asn Gly Arg Asn Leu Gly Arg Tyr Trp Asn  
50 55 60  
Ile Gly Pro Gln Lys Thr Leu Tyr Leu Pro Gly Val Trp Leu His Pro  
65 70 75 80  
Glu Asp Asn Glu Val Ile Leu Phe Glu Lys Met Met Ser Gly Ser Asp  
85 90 95  
Ile Lys Ser Thr Asp Lys Pro Thr Pro  
100 105

&lt;210&gt; 2313

&lt;211&gt; 567

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2313

Met Ala Ala Pro Gln Gly Leu Ala Ala Thr Ser Pro Ser Pro Arg Leu  
1 5 10 15  
Ser Ala Gly Pro Arg Pro Thr Ser Val Thr Trp Cys Ser Ser Ser Phe

|   |     |     |
|---|-----|-----|
| 20  | 25  | 30  |
| Trp Trp Thr Pro Ile Pro Phe Pro Leu Ala Ile Ser Ala Thr Thr Pro |     |     |
| 35  | 40  | 45  |
| Ser Pro Pro Arg Trp Pro Arg Trp Arg Ser Arg His Arg Pro Ala Pro |     |     |
| 50  | 55  | 60  |
| Arg Ser Pro Ser Ser Gly Trp Pro Gln Ser Ala Pro His Arg Glu Gly |     |     |
| 65  | 70  | 75  |
| Arg Tyr Leu Ser Glu Glu Pro Glu Pro Tyr Leu Ala Val Tyr Leu His |     |     |
| 85  | 90  | 95  |
| Ser Glu Pro Arg Pro Asn Glu Arg Asn Cys Ser Ala Ser Arg Arg Ile |     |     |
| 100   | 105 | 110 |
| Arg Pro Glu Ser Leu Gln Gly Ala Asp His Arg Pro Tyr Thr Phe Phe |     |     |
| 115   | 120 | 125 |
| Ile Ser Pro Gly Thr Arg Asp Pro Val Gly Ser Tyr Arg Leu Asn Leu |     |     |
| 130   | 135 | 140 |
| Ser Ser His Phe Arg Trp Ser Ala Leu Glu Val Ser Val Gly Leu Tyr |     |     |
| 145   | 150 | 155 |
| Thr Ser Leu Cys Gln Tyr Phe Ser Glu Glu Asp Val Val Trp Arg Thr |     |     |
| 165   | 170 | 175 |
| Glu Gly Leu Leu Pro Leu Glu Glu Thr Ser Pro Arg Gln Ala Val Cys |     |     |
| 180   | 185 | 190 |
| Leu Thr Arg His Leu Thr Ala Phe Gly Thr Ser Leu Phe Met Pro Pro |     |     |
| 195   | 200 | 205 |
| Ser His Val Arg Phe Val Phe Pro Glu Pro Thr Ala Asp Val Asn Tyr |     |     |
| 210   | 215 | 220 |
| Ile Val Met Leu Thr Cys Ala Val Cys Leu Val Thr Tyr Met Val Met |     |     |
| 225   | 230 | 235 |
| Ala Ala Ile Leu His Lys Leu Asp Gln Leu Asp Ala Ser Arg Gly Cys |     |     |
| 245   | 250 | 255 |

Ala Ile Pro Phe Cys Gly Gln Arg Gly Arg Phe Lys Tyr Glu Ile Leu  
 260 265 270  
 Val Lys Thr Gly Trp Gly Arg Gly Ser Gly Thr Thr Ala His Val Gly  
 275 280 285  
 Ile Met Leu Tyr Gly Val Asp Ser Arg Ser Gly His Arg His Leu Asp  
 290 295 300  
 Gly Asp Arg Ala Phe His Arg Asn Ser Leu Asp Ile Phe Gln Ile Ala  
 305 310 315 320  
 Thr Pro His Ser Leu Gly Ser Val Trp Lys Ile Arg Val Trp His Asp  
 325 330 335  
 Asn Lys Gly Leu Ser Pro Ala Trp Phe Leu Gln His Ile Ile Val Arg  
 340 345 350  
 Asp Leu Gln Thr Ala Arg Ser Thr Phe Phe Leu Val Asn Asp Trp Leu  
 355 360 365  
 Ser Val Glu Thr Glu Ala Asn Gly Gly Leu Val Glu Lys Glu Val Leu  
 370 375 380  
 Ala Ala Ser His Ala Ala Leu Leu Arg Phe Arg Arg Leu Leu Val Ala  
 385 390 395 400  
 Glu Leu Gln Arg Gly Phe Phe Asp Lys His Ile Trp Leu Ser Ile Trp  
 405 410 415  
 Asp Arg Pro Pro Arg Ser Cys Phe Thr Arg Ile Gln Arg Ala Thr Cys  
 420 425 430  
 Cys Val Leu Leu Ile Cys Leu Phe Leu Gly Ala Asn Ala Val Trp Tyr  
 435 440 445  
 Gly Ala Val Gly Asp Ser Ala Tyr Ser Thr Gly Arg Val Ser Arg Leu  
 450 455 460  
 Asn Pro Leu Ser Val Asp Thr Val Ala Val Gly Leu Val Ser Ser Val  
 465 470 475 480  
 Val Val Tyr Pro Val Tyr Leu Val Ile Leu Phe Leu Phe Arg Met Ser

|   |     |     |     |     |     |
|---|-----|-----|-----|-----|-----|
|   | 485 |     | 490 |     | 495 |
| Arg Ser Lys Val Ala Gly Ser Pro Ser Pro Thr Pro Ala Gly Gln Gln |     |     |     |     |     |
|   | 500 |     | 505 |     | 510 |
| Val Leu Asp Val Asp Ser Cys Leu Asp Ser Ser Val Leu Asp Ser Ser |     |     |     |     |     |
|   | 515 |     | 520 |     | 525 |
| Phe Leu Thr Phe Ser Gly Leu His Ala Glu Val Arg Ala Leu Leu Gly |     |     |     |     |     |
|   | 530 |     | 535 |     | 540 |
| Val Leu Pro Pro Trp Arg Ser Leu Asp Ser Arg Pro Cys Ala Pro Leu |     |     |     |     |     |
| 545   |     | 550 |     | 555 | 560 |
| Ser Arg Pro Leu Leu Asp Arg                                     |     |     |     |     |     |
|   | 565 |     |     |     |     |

&lt;210&gt; 2314

&lt;211&gt; 314

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2314

|   |    |    |    |
|---|----|----|----|
| Met Pro Lys Ser Pro Phe Lys Arg Lys Arg Thr Thr Asn Glu Ile Lys |    |    |    |
| 1   | 5  | 10 | 15 |
| Asn Leu Gln Tyr Leu Pro Arg Thr Ser Glu Pro Arg Glu Met Leu Phe |    |    |    |
|   | 20 | 25 | 30 |
| Glu Asp Arg Thr Arg Ala His Ala Asp His Ile Gly Gln Gly Phe Glu |    |    |    |
|   | 35 | 40 | 45 |
| Arg Gln Thr Thr Ala Ala Val Gly Val Leu Lys Ala Val His Cys Gly |    |    |    |
|   | 50 | 55 | 60 |
| Glu Trp Pro Asp Gln Pro Arg Ile Thr Lys Asp Val Ile Cys Phe His |    |    |    |
| 65  | 70 | 75 | 80 |



|   |     |     |     |
|---|-----|-----|-----|
| Ala Glu Asp Phe Leu Glu Val Val Gln Arg Met Gln Leu Asp Leu His |     |     |     |
|   | 85  | 90  | 95  |
| Glu Pro Pro Leu Ser Gln Cys Val Gln Trp Val Asp Asp Ala Lys Leu |     |     |     |
|   | 100 | 105 | 110 |
| Asn Gln Leu Arg Arg Glu Gly Ile Arg Tyr Ala Arg Ile Gln Leu Tyr |     |     |     |
|   | 115 | 120 | 125 |
| Asp Asn Asp Ile Tyr Phe Ile Pro Arg Asn Val Val His Gln Phe Lys |     |     |     |
|   | 130 | 135 | 140 |
| Thr Val Ser Ala Val Cys Ser Leu Ala Trp His Ile Arg Leu Lys Leu |     |     |     |
|   | 145 | 150 | 155 |
| Tyr His Ser Glu Glu Asp Thr Ser Gln Asn Thr Ala Thr His Glu Thr |     |     |     |
|   | 165 | 170 | 175 |
| Gly Thr Ser Ser Asp Ser Thr Ser Ser Val Leu Gly Pro His Thr Asp |     |     |     |
|   | 180 | 185 | 190 |
| Asn Met Ile Cys Ala Val Ser Lys Ala Ser Leu Asp Ser Val Phe Ser |     |     |     |
|   | 195 | 200 | 205 |
| Asp Lys Leu His Ser Lys Tyr Glu Leu Gln Gln Ile Lys His Glu Pro |     |     |     |
|   | 210 | 215 | 220 |
| Ile Ala Ser Val Arg Ile Lys Glu Glu Pro Val Asn Val Asn Ile Pro |     |     |     |
|   | 225 | 230 | 235 |
| Glu Lys Thr Thr Ala Leu Asn Asn Met Asp Gly Lys Asn Val Lys Ala |     |     |     |
|   | 245 | 250 | 255 |
| Lys Leu Asp His Val Gln Phe Ala Glu Phe Lys Ile Asp Met Asp Ser |     |     |     |
|   | 260 | 265 | 270 |
| Lys Phe Glu Ser Ser Asn Lys Asp Leu Lys Glu Glu Leu Cys Pro Gly |     |     |     |
|   | 275 | 280 | 285 |
| Asn Leu Ser Leu Val Asp Thr Arg Gln His Ser Ser Ala His Ser Asn |     |     |     |
|   | 290 | 295 | 300 |
| Gln Asp Lys Lys Asp Asp Asp Ile Leu Cys                         |     |     |     |

305

310

&lt;210&gt; 2315

&lt;211&gt; 200

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2315

Met Ala Gln Gln Arg Ala Leu Pro Gln Ser Lys Glu Thr Leu Leu Gln

1 5 10 15

Ser Tyr Asn Lys Arg Leu Lys Asp Asp Ile Lys Ser Ile Met Asp Asn

20 25 30

Phe Thr Glu Ile Ile Lys Thr Ala Lys Ile Glu Asp Glu Thr Gln Val

35 40 45

Ser Arg Ala Thr Gln Gly Glu Gln Asp Asn Tyr Glu Met His Val Arg

50 55 60

Ala Ala Asn Ile Val Arg Ala Gly Glu Ser Leu Met Lys Leu Val Ser

65 70 75 80

Asp Leu Lys Gln Phe Leu Ile Leu Asn Asp Phe Pro Ser Val Asn Glu

85 90 95

Ala Ile Asp Gln Arg Asn Gln Gln Leu Arg Thr Leu Gln Glu Glu Cys

100 105 110

Asp Arg Lys Leu Ile Thr Leu Arg Asp Glu Ile Ser Ile Asp Leu Tyr

115 120 125

Glu Leu Glu Glu Glu Tyr Tyr Ser Ser Ser Ser Ser Leu Cys Glu Ala

130 135 140

Asn Asp Leu Pro Leu Cys Glu Ala Tyr Gly Arg Leu Asp Leu Asp Thr

145 150 155 160

Asp Ser Ala Asp Gly Leu Ser Ala Pro Leu Leu Ala Ser Pro Glu Pro  
                     165                    170                    175  
 Ser Ala Gly Pro Leu Gln Val Ala Ala Pro Ala His Ser His Ala Gly  
                     180                    185                    190  
 Gly Pro Gly Pro Thr Glu His Ala  
                     195                    200

<210> 2316

<211> 102

<212> PRT

<213> Homo sapiens

<400> 2316

Met Thr Thr Ala Thr Pro Leu Gly Asp Thr Thr Phe Phe Ser Leu Asn  
     1                    5                    10                    15  
 Met Thr Thr Arg Gly Glu Asp Phe Leu Tyr Lys Ser Ser Gly Ala Ile  
                     20                    25                    30  
 Val Ala Ala Val Val Val Val Val Ile Ile Ile Phe Thr Val Val Leu  
                     35                    40                    45  
 Ile Leu Leu Lys Met Tyr Asn Arg Lys Met Arg Thr Arg Arg Glu Leu  
                     50                    55                    60  
 Glu Pro Lys Gly Pro Lys Pro Thr Ala Pro Ser Ala Val Gly Pro Asn  
     65                    70                    75                    80  
 Ser Asn Gly Ser Gln His Pro Ala Thr Val Thr Phe Ser Pro Val Asp  
                     85                    90                    95  
 Val Gln Val Glu Thr Arg  
                     100

&lt;210&gt; 2317

&lt;211&gt; 133

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2317

Met Val Met Leu Glu Asp Ser Asn Ser Ser Thr Gly Cys Gly Ala Arg

1 5 10 15

Asn Cys Val Glu Cys Leu Val Phe Leu Ser Val Leu Gly Cys Gln Ser

20 25 30

Glu Arg Lys Gly Gln Met Arg Thr Gln Gln Ala Gly Arg Trp Leu Arg

35 40 45

Ala Gly Arg Glu Ala Ser Ser Glu Thr Asn Pro Glu Gly Thr Leu Ile

50 55 60

Leu Asp Phe Gln Ser Pro Glu Leu Pro Leu Ala Ala Arg Gly Trp Gln

65 70 75 80

Glu His Glu Pro Val Val Arg Cys Asn Val Leu Pro His Ala Phe Ser

85 90 95

Ser Trp Cys Phe Gly Gln Asn Phe Pro Lys Trp Ser Glu Thr Gln Glu

100 105 110

Leu Arg Asn Arg Val Thr Val Lys Arg Trp Glu Ile Ile Ser Cys Glu

115 120 125

Asn Ser Gly Arg Lys

130

&lt;210&gt; 2318

&lt;211&gt; 224

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2318

|     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| Met | Tyr | Arg | Pro | Ala | Thr | Ala | Leu | Gly | Ser | Asn | Arg | Ala | Val | Gln | Leu |
| 1   |     |     |     | 5   |     |     |     |     | 10  |     |     |     |     | 15  |     |
| Leu | Leu | Glu | Thr | Ser | Ala | Asp | Asn | Gln | His | Tyr | Tyr | Cys | Asp | Ser | Leu |
|     |     |     | 20  |     |     |     |     | 25  |     |     |     |     | 30  |     |     |
| Lys | Ala | Cys | Leu | Val | Thr | Thr | Val | Thr | Ser | Ser | Gly | Pro | Ser | Gln | Ser |
|     |     | 35  |     |     |     |     | 40  |     |     |     |     | 45  |     |     |     |
| Thr | Ile | Lys | Leu | Val | Ala | Thr | Asn | Met | Ile | Ala | Asn | Gly | Lys | Leu | Ala |
|     | 50  |     |     |     |     | 55  |     |     |     |     | 60  |     |     |     |     |
| Glu | Gly | Val | Gln | Leu | Leu | Cys | Leu | Ile | Asp | Lys | Ala | Ala | Asp | Ala | Cys |
| 65  |     |     |     | 70  |     |     |     |     | 75  |     |     |     |     | 80  |     |
| Arg | Tyr | Leu | Gln | Thr | Tyr | Gly | Glu | Trp | Asn | Arg | Ala | Ala | Trp | Leu | Ala |
|     |     |     | 85  |     |     |     |     | 90  |     |     |     |     |     | 95  |     |
| Lys | Val | Arg | Leu | Asn | Pro | Glu | Glu | Cys | Ala | Asp | Val | Leu | Arg | Arg | Trp |
|     |     | 100 |     |     |     |     |     | 105 |     |     |     |     | 110 |     |     |
| Val | Asp | His | Leu | Cys | Ser | Pro | Gln | Val | Asn | Gln | Lys | Ser | Lys | Ala | Leu |
|     |     | 115 |     |     |     |     | 120 |     |     |     |     |     | 125 |     |     |
| Leu | Val | Leu | Leu | Ser | Leu | Gly | Cys | Phe | Phe | Ser | Val | Ala | Glu | Thr | Leu |
|     | 130 |     |     |     |     | 135 |     |     |     |     |     | 140 |     |     |     |
| His | Ser | Met | Arg | Tyr | Phe | Asp | Arg | Ala | Ala | Leu | Phe | Val | Glu | Ala | Cys |
| 145 |     |     |     | 150 |     |     |     |     | 155 |     |     |     |     | 160 |     |
| Leu | Lys | Tyr | Gly | Ala | Phe | Glu | Val | Thr | Glu | Asp | Thr | Glu | Lys | Leu | Ile |
|     |     |     | 165 |     |     |     |     | 170 |     |     |     |     | 175 |     |     |
| Thr | Ala | Ile | Tyr | Ala | Asp | Tyr | Ala | Arg | Ser | Ser | Lys | Asn | Leu | Gly | Phe |
|     |     | 180 |     |     |     |     |     | 185 |     |     |     |     | 190 |     |     |
| Lys | Gln | Gly | Ala | Val | Leu | Phe | Ala | Ser | Lys | Ala | Gly | Ala | Ala | Gly | Lys |

|   |     |     |
|---|-----|-----|
| 195   | 200 | 205 |
| Asp Leu Leu Asn Glu Leu Glu Ser Pro Lys Glu Glu Pro Ile Glu Glu |     |     |
| 210   | 215 | 220 |

<210> 2319

<211> 111

<212> PRT

<213> Homo sapiens

<400> 2319

|   |     |     |
|---|-----|-----|
| Met Pro Gly Ser Leu Lys Arg Asp His Ile Leu Tyr His Leu Ile Leu |     |     |
| 1   | 5   | 10  |
| Ile Trp Gly Ile Ile Phe Ile Ser His Gln Asp Lys Ile Pro Gly Gly |     |     |
| 20  | 25  | 30  |
| Gly Ile Thr Cys Lys Val His Thr Ser Pro Pro Met Tyr Ser Leu Asp |     |     |
| 35  | 40  | 45  |
| Arg Ile Phe Ala Gly Phe Arg Thr Gln Ser Gln Met Leu Leu Asp His |     |     |
| 50  | 55  | 60  |
| Val Glu Glu Arg Asp Glu Val Leu His Cys Gln Phe Ser Asp Asn Ser |     |     |
| 65  | 70  | 75  |
| Asp Asp Glu Glu Ser Glu Gly Gln Glu Lys Ser Gly Thr Arg Cys Arg |     |     |
| 85  | 90  | 95  |
| Ser Arg Ser Trp Ile Gln Lys Pro Asp Ser Val Pro Leu Leu Asn     |     |     |
| 100   | 105 | 110 |

<210> 2320

<211> 733

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2320

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Met Pro Ala Glu Thr Asp Glu Cys Arg Leu Asn Gln Asn Ile Cys Gly
  1             5             10             15
His Gly Glu Cys Val Pro Gly Pro Pro Asp Tyr Ser Cys Tyr Cys Asn
      20             25             30
Pro Gly Tyr Arg Ser His Pro Gln His Arg Tyr Cys Val Asp Val Asn
      35             40             45
Glu Cys Glu Ala Glu Pro Cys Gly Pro Gly Arg Gly Ile Cys Met Asn
      50             55             60
Thr Gly Gly Ser Tyr Asn Cys His Cys Asn Arg Gly Tyr Arg Leu His
      65             70             75             80
Val Gly Ala Gly Gly Arg Ser Cys Val Asp Leu Asn Glu Cys Ala Lys
      85             90             95
Pro His Leu Cys Gly Asp Gly Gly Phe Cys Ile Asn Phe Pro Gly His
      100            105            110
Tyr Lys Cys Asn Cys Tyr Pro Gly Tyr Arg Leu Lys Ala Ser Arg Pro
      115            120            125
Pro Val Cys Glu Asp Ile Asp Glu Cys Arg Asp Pro Ser Ser Cys Pro
      130            135            140
Asp Gly Lys Cys Glu Asn Lys Pro Gly Ser Phe Lys Cys Ile Ala Cys
      145            150            155            160
Gln Pro Gly Tyr Arg Ser Gln Gly Gly Gly Ala Cys Arg Asp Val Asn
      165            170            175
Glu Cys Ala Glu Gly Ser Pro Cys Ser Pro Gly Trp Cys Glu Asn Leu
      180            185            190
Pro Gly Ser Phe Arg Cys Thr Cys Ala Gln Gly Tyr Ala Pro Ala Pro

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|   |                                 |     |
|---|---------------------------------|-----|
| 195   | 200                             | 205 |
| Asp Gly Arg Ser Cys Leu Asp Val                                 | Asp Glu Cys Glu Ala Gly Asp Val |     |
| 210   | 215                             | 220 |
| Cys Asp Asn Gly Ile Cys Ser Asn Thr Pro Gly Ser Phe Gln Cys Gln |                                 |     |
| 225   | 230                             | 235 |
| Cys Leu Ser Gly Tyr His Leu Ser Arg Asp Arg Ser His Cys Glu Asp |                                 |     |
| 245   | 250                             | 255 |
| Ile Asp Glu Cys Asp Phe Pro Ala Ala Cys Ile Gly Gly Asp Cys Ile |                                 |     |
| 260   | 265                             | 270 |
| Asn Thr Asn Gly Ser Tyr Arg Cys Leu Cys Pro Gln Gly His Arg Leu |                                 |     |
| 275   | 280                             | 285 |
| Val Gly Gly Arg Lys Cys Gln Asp Ile Asp Glu Cys Ser Gln Asp Pro |                                 |     |
| 290   | 295                             | 300 |
| Ser Leu Cys Leu Pro His Gly Ala Cys Lys Asn Leu Gln Gly Ser Tyr |                                 |     |
| 305   | 310                             | 315 |
| Val Cys Val Cys Asp Glu Gly Phe Thr Pro Thr Gln Asp Gln His Gly |                                 |     |
| 325   | 330                             | 335 |
| Cys Glu Glu Val Glu Gln Pro His His Lys Lys Glu Cys Tyr Leu Asn |                                 |     |
| 340   | 345                             | 350 |
| Phe Asp Asp Thr Val Phe Cys Asp Ser Val Leu Ala Thr Asn Val Thr |                                 |     |
| 355   | 360                             | 365 |
| Gln Gln Glu Cys Cys Cys Ser Leu Gly Ala Gly Trp Gly Asp His Cys |                                 |     |
| 370   | 375                             | 380 |
| Glu Ile Tyr Pro Cys Pro Val Tyr Ser Ser Ala Glu Phe His Ser Leu |                                 |     |
| 385   | 390                             | 395 |
| Cys Pro Asp Gly Lys Gly Tyr Thr Gln Asp Asn Ile Ile Val Asn Tyr |                                 |     |
| 405   | 410                             | 415 |
| Gly Ile Pro Ala His Arg Asp Ile Asp Glu Cys Met Leu Phe Gly Ser |                                 |     |
| 420   | 425                             | 430 |



Glu Ile Cys Lys Glu Gly Lys Cys Val Asn Thr Gln Pro Gly Tyr Glu  
435 440 445

Cys Tyr Cys Lys Gln Gly Phe Tyr Tyr Asp Gly Asn Leu Leu Glu Cys  
450 455 460

Val Asp Val Asp Glu Cys Leu Asp Glu Ser Asn Cys Arg Asn Gly Val  
465 470 475 480

Cys Glu Asn Thr Arg Gly Gly Tyr Arg Cys Ala Cys Thr Pro Pro Ala  
485 490 495

Glu Tyr Ser Pro Ala Gln Arg Gln Cys Leu Ser Pro Glu Glu Met Asp  
500 505 510

Val Asp Glu Cys Gln Asp Pro Ala Ala Cys Arg Pro Gly Arg Cys Val  
515 520 525

Asn Leu Pro Gly Ser Tyr Arg Cys Glu Cys Arg Pro Pro Trp Val Pro  
530 535 540

Gly Pro Ser Gly Arg Asp Cys Gln Leu Pro Glu Ser Pro Ala Glu Arg  
545 550 555 560

Ala Pro Glu Arg Arg Asp Val Cys Trp Ser Gln Arg Gly Glu Asp Gly  
565 570 575

Met Cys Ala Gly Pro Leu Ala Gly Pro Ala Leu Thr Phe Asp Asp Cys  
580 585 590

Cys Cys Arg Gln Gly Arg Gly Trp Gly Ala Gln Cys Arg Pro Cys Pro  
595 600 605

Pro Arg Gly Ala Gly Ser His Cys Pro Thr Ser Gln Ser Glu Ser Asn  
610 615 620

Ser Phe Trp Asp Thr Ser Pro Leu Leu Leu Gly Lys Pro Pro Arg Asp  
625 630 635 640

Glu Asp Ser Ser Glu Glu Asp Ser Asp Glu Cys Arg Cys Val Ser Gly  
645 650 655

Arg Cys Val Pro Arg Pro Gly Gly Ala Val Cys Glu Cys Pro Gly Gly

|   |     |     |     |
|---|-----|-----|-----|
| 660   | 665 | 670 |     |
| Phe Gln Leu Asp Ala Ser Arg Ala Arg Cys Val Asp Ile Asp Glu Cys |     |     |     |
| 675   | 680 | 685 |     |
| Arg Glu Leu Asn Gln Arg Gly Leu Leu Cys Lys Ser Glu Arg Cys Val |     |     |     |
| 690   | 695 | 700 |     |
| Asn Thr Ser Gly Ser Phe Arg Cys Val Cys Lys Ala Gly Phe Ala Arg |     |     |     |
| 705   | 710 | 715 | 720 |
| Ser Arg Pro His Gly Ala Cys Val Pro Gln Arg Arg Arg             |     |     |     |
| 725   | 730 |     |     |

&lt;210&gt; 2321

&lt;211&gt; 841

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2321

|   |    |    |    |
|---|----|----|----|
| Met Thr Val Leu Glu Gln Asp Thr Gln Gly Leu Asp Gly Trp Trp Leu |    |    |    |
| 1   | 5  | 10 | 15 |
| Cys Ser Leu His Gly Arg Gln Gly Ile Val Pro Gly Asn Arg Leu Lys |    |    |    |
| 20  | 25 | 30 |    |
| Ile Leu Val Gly Met Tyr Asp Lys Lys Pro Ala Gly Pro Gly Ser Gly |    |    |    |
| 35  | 40 | 45 |    |
| Pro Pro Ala Thr Pro Ala Gln Pro Gln Pro Gly Leu His Ala Pro Ala |    |    |    |
| 50  | 55 | 60 |    |
| Pro Pro Ala Ser Gln Tyr Thr Pro Met Leu Pro Asn Thr Tyr Gln Pro |    |    |    |
| 65  | 70 | 75 | 80 |
| Gln Pro Asp Ser Val Tyr Leu Val Pro Thr Pro Ser Lys Ala Gln Gln |    |    |    |
| 85  | 90 | 95 |    |

Gly Leu Tyr Gln Val Pro Gly Pro Ser Pro Gln Phe Gln Ser Pro Pro  
100 105 110  
Ala Lys Gln Thr Ser Thr Phe Ser Lys Gln Thr Pro His His Pro Phe  
115 120 125  
Pro Ser Pro Ala Thr Asp Leu Tyr Gln Val Pro Pro Gly Pro Gly Gly  
130 135 140  
Pro Ala Gln Asp Ile Tyr Gln Val Pro Pro Ser Ala Gly Met Gly His  
145 150 155 160  
Asp Ile Tyr Gln Val Pro Pro Ser Met Asp Thr Arg Ser Trp Glu Gly  
165 170 175  
Thr Lys Pro Pro Ala Lys Val Val Val Pro Thr Arg Val Gly Gln Gly  
180 185 190  
Tyr Val Tyr Glu Ala Ala Gln Pro Glu Gln Asp Glu Tyr Asp Ile Pro  
195 200 205  
Arg His Leu Leu Ala Pro Gly Pro Gln Asp Ile Tyr Asp Val Pro Pro  
210 215 220  
Val Arg Gly Leu Leu Pro Ser Gln Tyr Gly Gln Glu Val Tyr Asp Thr  
225 230 235 240  
Pro Pro Met Ala Val Lys Gly Pro Asn Gly Arg Asp Pro Leu Leu Glu  
245 250 255  
Val Tyr Asp Val Pro Pro Ser Val Glu Lys Gly Leu Pro Pro Ser Asn  
260 265 270  
His His Ala Val Tyr Asp Val Pro Pro Ser Val Ser Lys Asp Val Pro  
275 280 285  
Asp Gly Pro Leu Leu Arg Glu Glu Thr Tyr Asp Val Pro Pro Ala Phe  
290 295 300  
Ala Lys Ala Lys Pro Phe Asp Pro Ala Arg Thr Pro Leu Val Leu Ala  
305 310 315 320  
Ala Pro Pro Pro Asp Ser Pro Pro Ala Glu Asp Val Tyr Asp Val Pro

325 330 335  
Pro Pro Ala Pro Asp Leu Tyr Asp Val Pro Pro Gly Leu Arg Arg Pro  
340 345 350  
Gly Pro Gly Thr Leu Tyr Asp Val Pro Arg Glu Arg Val Leu Pro Pro  
355 360 365  
Glu Val Ala Asp Gly Gly Val Val Asp Ser Gly Val Tyr Ala Val Pro  
370 375 380  
Pro Pro Ala Glu Arg Glu Ala Pro Ala Glu Gly Lys Arg Leu Ser Ala  
385 390 395 400  
Ser Ser Thr Gly Ser Thr Arg Ser Ser Gln Ser Ala Ser Ser Leu Glu  
405 410 415  
Val Ala Gly Pro Gly Arg Glu Pro Leu Glu Leu Glu Val Ala Val Glu  
420 425 430  
Ala Leu Ala Arg Leu Gln Gln Gly Val Ser Ala Thr Val Ala His Leu  
435 440 445  
Leu Asp Leu Ala Gly Ser Ala Gly Ala Thr Gly Ser Trp Arg Ser Pro  
450 455 460  
Ser Glu Pro Gln Glu Pro Leu Val Gln Asp Leu Gln Ala Ala Val Ala  
465 470 475 480  
Ala Val Gln Ser Ala Val His Glu Leu Leu Glu Phe Ala Arg Ser Ala  
485 490 495  
Val Gly Asn Ala Ala His Thr Ser Asp Arg Ala Leu His Ala Lys Leu  
500 505 510  
Ser Arg Gln Leu Gln Lys Met Glu Asp Val His Gln Thr Leu Val Ala  
515 520 525  
His Gly Gln Ala Leu Asp Ala Gly Arg Gly Gly Ser Gly Ala Thr Leu  
530 535 540  
Glu Asp Leu Asp Arg Leu Val Ala Cys Ser Arg Ala Val Pro Glu Asp  
545 550 555 560

Ala Lys Gln Leu Ala Ser Phe Leu His Gly Asn Ala Ser Leu Leu Phe  
565 570 575  
Arg Arg Thr Lys Ala Thr Ala Pro Gly Pro Glu Gly Gly Gly Thr Leu  
580 585 590  
His Pro Asn Pro Thr Asp Lys Thr Ser Ser Ile Gln Ser Arg Pro Leu  
595 600 605  
Pro Ser Pro Pro Lys Phe Thr Ser Gln Asp Ser Pro Asp Gly Gln Tyr  
610 615 620  
Glu Asn Ser Glu Gly Gly Trp Met Glu Asp Tyr Asp Tyr Val His Leu  
625 630 635 640  
Gln Gly Lys Glu Glu Phe Glu Lys Thr Gln Lys Glu Leu Leu Glu Lys  
645 650 655  
Gly Ser Ile Thr Arg Gln Gly Lys Ser Gln Leu Glu Leu Gln Gln Leu  
660 665 670  
Lys Gln Phe Glu Arg Leu Glu Gln Glu Val Ser Arg Pro Ile Asp His  
675 680 685  
Asp Leu Ala Asn Trp Thr Pro Ala Gln Pro Leu Ala Pro Gly Arg Thr  
690 695 700  
Gly Gly Leu Gly Pro Ser Asp Arg Gln Leu Leu Leu Phe Tyr Leu Glu  
705 710 715 720  
Gln Cys Glu Ala Asn Leu Thr Thr Leu Thr Asn Ala Val Asp Ala Phe  
725 730 735  
Phe Thr Ala Val Ala Thr Asn Gln Pro Pro Lys Ile Phe Val Ala His  
740 745 750  
Ser Lys Phe Val Ile Leu Ser Ala His Lys Leu Val Phe Ile Gly Asp  
755 760 765  
Thr Leu Ser Arg Gln Ala Lys Ala Ala Asp Val Arg Ser Gln Val Thr  
770 775 780  
His Tyr Ser Asn Leu Leu Cys Asp Leu Leu Arg Gly Ile Val Ala Thr

785                      790                      795                      800  
 Thr Lys Ala Ala Ala Leu Gln Tyr Pro Ser Pro Ser Ala Ala Gln Asp  
                             805                      810                      815  
 Met Val Glu Arg Val Lys Glu Leu Gly His Ser Thr Gln Gln Phe Arg  
                             820                      825                      830  
 Arg Val Leu Gly Gln Leu Ala Ala Ala  
                             835                      840

<210> 2322

<211> 113

<212> PRT

<213> Homo sapiens

<400> 2322

Met Lys Ser Leu Met Leu Leu Gly Leu His Thr Gln Glu Leu Leu Thr  
     1                      5                      10                      15  
 Leu Met Phe Gly Ala Ser Gly Glu Ser Trp Lys Ser Gly Ser Cys Pro  
                             20                      25                      30  
 Gly Ser Ile Ser Thr Trp Ser Leu Lys Tyr His Val Ile Pro Pro Ser  
                             35                      40                      45  
 Pro Ser Gly Leu Ser Ser Ser Pro Trp Ser Leu Trp His Ser Asn Lys  
                             50                      55                      60  
 His Val Met Gly Gln Gly Phe Arg Arg Val Lys Asn Arg Ile Cys Leu  
     65                      70                      75                      80  
 Ala Ser Gln Ser Leu Glu Thr His Arg Ala Ser Phe Gln Leu His Ser  
                             85                      90                      95  
 Cys Trp Ser Glu Pro Val Ile Thr Lys Pro Ala Glu Ile Gln Gly Asn  
                             100                      105                      110

Arg

&lt;210&gt; 2323

&lt;211&gt; 257

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2323

|     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| Met | Pro | Gly | Gly | Val | Gln | Gly | Ser | Gly | Leu | Thr | Arg | Pro | Arg | Gly | His |
| 1   |     |     |     | 5   |     |     |     |     | 10  |     |     |     |     | 15  |     |
| Pro | Gln | Asp | Asp | Leu | Trp | Pro | Arg | Val | Thr | Pro | Phe | Cys | Pro | Ala | Gly |
|     |     |     |     | 20  |     |     |     | 25  |     |     |     |     | 30  |     |     |
| Gln | His | Ile | Tyr | Leu | Ser | Ala | Arg | Ile | Asp | Gly | Asn | Leu | Val | Val | Arg |
|     |     | 35  |     |     |     |     | 40  |     |     |     |     | 45  |     |     |     |
| Pro | Tyr | Thr | Pro | Ile | Ser | Ser | Asp | Asp | Asp | Lys | Gly | Phe | Val | Asp | Leu |
|     | 50  |     |     |     |     | 55  |     |     |     |     | 60  |     |     |     |     |
| Val | Ile | Lys | Val | Tyr | Phe | Lys | Asp | Thr | His | Pro | Lys | Phe | Pro | Ala | Gly |
|     | 65  |     |     |     | 70  |     |     |     |     | 75  |     |     |     | 80  |     |
| Gly | Lys | Met | Ser | Gln | Tyr | Leu | Glu | Ser | Met | Gln | Ile | Gly | Asp | Thr | Ile |
|     |     |     |     | 85  |     |     |     |     | 90  |     |     |     |     | 95  |     |
| Glu | Phe | Arg | Gly | Pro | Ser | Gly | Leu | Leu | Val | Tyr | Gln | Gly | Lys | Gly | Lys |
|     |     |     | 100 |     |     |     |     | 105 |     |     |     |     | 110 |     |     |
| Phe | Ala | Ile | Arg | Pro | Asp | Lys | Lys | Ser | Asn | Pro | Ile | Ile | Arg | Thr | Val |
|     |     | 115 |     |     |     |     | 120 |     |     |     |     | 125 |     |     |     |
| Lys | Ser | Val | Gly | Met | Ile | Ala | Gly | Gly | Thr | Gly | Ile | Thr | Pro | Met | Leu |
|     |     | 130 |     |     |     |     | 135 |     |     |     |     | 140 |     |     |     |
| Gln | Val | Ile | Arg | Ala | Ile | Met | Lys | Asp | Pro | Asp | Asp | His | Thr | Val | Cys |

145                      150                      155                      160  
 His Leu Leu Phe Ala Asn Gln Thr Glu Lys Asp Ile Leu Leu Arg Pro  
                          165                      170                      175  
 Glu Leu Glu Glu Leu Arg Asn Lys His Ser Ala Arg Phe Lys Leu Trp  
                          180                      185                      190  
 Tyr Thr Leu Asp Arg Ala Pro Glu Ala Trp Asp Tyr Gly Gln Gly Phe  
                          195                      200                      205  
 Val Asn Glu Glu Met Ile Arg Asp His Leu Pro Pro Pro Glu Glu Glu  
                          210                      215                      220  
 Pro Leu Val Leu Met Cys Gly Pro Pro Pro Met Ile Gln Tyr Ala Cys  
 225                      230                      235                      240  
 Leu Pro Asn Leu Asp His Val Gly His Pro Thr Glu Arg Cys Phe Val  
                          245                      250                      255  
 Phe

<210> 2324

<211> 100

<212> PRT

<213> Homo sapiens

<400> 2324

Met Ala Gly Gly Lys Gly Ala Lys Gln Ile Phe Pro Thr Phe Tyr Leu  
     1                      5                      10                      15  
 Ala Asn Leu Ser Phe Ala Ala Val Met Cys Gln Val Leu Gly Cys Trp  
                          20                      25                      30  
 Gly Ile Pro Ser Glu Gln Ser Leu Phe Ser Thr Leu Glu Glu Leu Arg  
                          35                      40                      45



Glu Lys Glu Ile Asp Asn Tyr Cys Val Met Arg Leu Gln Thr Glu Gly  
 50 55 60  
 Leu Ala Ser Ala His Pro Ser Trp Ala Ser Arg Gly His Cys Ser Ile  
 65 70 75 80  
 Thr Thr Arg Pro Cys Thr Pro Ala Ser Pro Pro Ser Pro Ser Trp Ala  
 85 90 95  
 Trp Ala Pro Leu  
 100

<210> 2325

<211> 449

<212> PRT

<213> Homo sapiens

<400> 2325

Met Met Leu Gly Thr Glu Gly Gly Glu Gly Phe Val Val Lys Val Arg  
 1 5 10 15  
 Gly Leu Pro Trp Ser Cys Ser Ala Asp Glu Val Gln Arg Phe Phe Ser  
 20 25 30  
 Asp Cys Lys Ile Gln Asn Gly Ala Gln Gly Ile Arg Phe Ile Tyr Thr  
 35 40 45  
 Arg Glu Gly Arg Pro Ser Gly Glu Ala Phe Val Glu Leu Glu Ser Glu  
 50 55 60  
 Asp Glu Val Lys Leu Ala Leu Lys Lys Asp Arg Glu Thr Met Gly His  
 65 70 75 80  
 Arg Tyr Val Glu Val Phe Lys Ser Asn Asn Val Glu Met Asp Trp Val  
 85 90 95  
 Leu Lys His Thr Gly Pro Asn Ser Pro Asp Thr Ala Asn Asp Gly Phe

|   |     |     |     |
|---|-----|-----|-----|
| 100   | 105 | 110 |     |
| Val Arg Leu Arg Gly Leu Pro Phe Gly Cys Ser Lys Glu Glu Ile Val |     |     |     |
| 115   | 120 | 125 |     |
| Gln Phe Phe Ser Gly Leu Glu Ile Val Pro Asn Gly Ile Thr Leu Pro |     |     |     |
| 130   | 135 | 140 |     |
| Val Asp Phe Gln Gly Arg Ser Thr Gly Glu Ala Phe Val Gln Phe Ala |     |     |     |
| 145   | 150 | 155 | 160 |
| Ser Gln Glu Ile Ala Glu Lys Ala Leu Lys Lys His Lys Glu Arg Ile |     |     |     |
| 165   | 170 | 175 |     |
| Gly His Arg Tyr Ile Glu Ile Phe Lys Ser Ser Arg Ala Glu Val Arg |     |     |     |
| 180   | 185 | 190 |     |
| Thr His Tyr Asp Pro Pro Arg Lys Leu Met Ala Met Gln Arg Pro Gly |     |     |     |
| 195   | 200 | 205 |     |
| Pro Tyr Asp Arg Pro Gly Ala Gly Arg Gly Tyr Asn Ser Ile Gly Arg |     |     |     |
| 210   | 215 | 220 |     |
| Gly Ala Gly Phe Glu Arg Met Arg Arg Gly Ala Tyr Gly Gly Gly Tyr |     |     |     |
| 225   | 230 | 235 | 240 |
| Gly Gly Tyr Asp Asp Tyr Asn Gly Tyr Asn Asp Gly Tyr Gly Phe Gly |     |     |     |
| 245   | 250 | 255 |     |
| Ser Asp Arg Phe Gly Arg Asp Leu Asn Tyr Cys Phe Ser Gly Met Ser |     |     |     |
| 260   | 265 | 270 |     |
| Asp His Arg Tyr Gly Asp Gly Gly Ser Thr Phe Gln Ser Thr Thr Gly |     |     |     |
| 275   | 280 | 285 |     |
| His Cys Val His Met Arg Gly Leu Pro Tyr Arg Ala Thr Glu Asn Asp |     |     |     |
| 290   | 295 | 300 |     |
| Ile Tyr Asn Phe Phe Ser Pro Leu Asn Pro Val Arg Val His Ile Glu |     |     |     |
| 305   | 310 | 315 | 320 |
| Ile Gly Pro Asp Gly Arg Val Thr Gly Glu Ala Asp Val Glu Phe Ala |     |     |     |
| 325   | 330 | 335 |     |

Thr His Glu Asp Ala Val Ala Ala Met Ser Lys Asp Lys Ala Asn Met  
                   340                                  345                                  350  
 Gln His Arg Tyr Val Glu Leu Phe Leu Asn Ser Thr Ala Gly Ala Ser  
                   355                                  360                                  365  
 Gly Gly Ala Tyr Glu His Arg Tyr Val Glu Leu Phe Leu Asn Ser Thr  
                   370                                  375                                  380  
 Ala Gly Ala Ser Gly Gly Ala Tyr Gly Ser Gln Met Met Gly Gly Met  
                   385                                  390                                  395                                  400  
 Gly Leu Ser Asn Gln Ser Ser Tyr Gly Gly Pro Ala Ser Gln Gln Leu  
                                   405                                  410                                  415  
 Ser Gly Gly Tyr Gly Gly Gly Tyr Gly Gly Gln Ser Ser Met Ser Gly  
                   420                                  425                                  430  
 Tyr Asp Gln Val Leu Gln Glu Asn Ser Ser Asp Phe Gln Ser Asn Ile  
                   435                                  440                                  445  
 Ala

<210> 2326

<211> 109

<212> PRT

<213> Homo sapiens

<400> 2326

Met Asp Ile Pro Lys Cys Tyr Pro Pro Cys Lys Val Ser Trp Pro Pro  
       1                                  5                                  10                                  15  
 Lys Leu Glu Asp Val Thr Asp Pro Pro Leu Pro Asn Thr Glu Gly Ser  
                   20                                  25                                  30  
 Cys Cys Cys Ser His Gly His Pro Phe Thr Gln Pro Ala Ser Leu Lys

|   |     |    |
|---|-----|----|
| 35  | 40  | 45 |
| Cys Arg Leu Pro Ser His Pro Ser Leu Lys Ala Pro Val Leu Val Thr |     |    |
| 50  | 55  | 60 |
| Leu Pro Ile Thr Ala Gln Thr Arg Ala His Tyr Val Pro Glu Ala Glu |     |    |
| 65  | 70  | 75 |
| Asp Phe Gln Arg Asn Tyr Leu Phe Val Lys Ile Gln Ser Asn Ile Tyr |     |    |
| 85  | 90  | 95 |
| Ile Thr Tyr Leu Tyr His Gln Tyr Cys Leu His Met Phe             |     |    |
| 100   | 105 |    |

&lt;210&gt; 2327

&lt;211&gt; 152

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2327

|   |    |    |
|---|----|----|
| Met Gly Arg Ser Gly Cys Gly Ser Arg Gly Gly Ile Leu Ser Trp Arg |    |    |
| 1   | 5  | 10 |
| Ala Pro Gln Arg Ser Pro Gly Ser Leu Ser Pro Trp Leu Leu Gly Arg |    |    |
| 20  | 25 | 30 |
| Arg Gly Arg Arg Pro Trp Gly Ser Ser Arg Gly Leu Gly Gly Gly Asp |    |    |
| 35  | 40 | 45 |
| Arg Trp Leu Gly Met Glu Glu Ala Lys Pro Arg Ala Phe Ser Pro Ala |    |    |
| 50  | 55 | 60 |
| Pro Ala Gly Asp Phe Gln Ala Pro Ser Thr Ala Asp Arg Ala Arg Ala |    |    |
| 65  | 70 | 75 |
| Arg Gly Arg Trp Cys Gly Asp Leu Pro Gly Leu Trp Gly His Glu Arg |    |    |
| 85  | 90 | 95 |

Leu Pro Asp Ala Leu Ala Pro Gln Ala Leu Leu Val Thr Gly Thr Gly  
 100 105 110  
 Leu Gly Ser Ile Trp Ala Thr Ala Val Thr Leu Arg Pro Leu Leu Arg  
 115 120 125  
 Pro Gly Gln Gly Ser Val Gly Ala Gly Arg Lys Gly Thr His Ser Phe  
 130 135 140  
 Leu Gly Ala Pro Val Trp Pro Ala  
 145 150

<210> 2328

<211> 229

<212> PRT

<213> Homo sapiens

<400> 2328

Met Asn His Glu Trp Ile Gly Asn Glu Trp Leu Pro Ser Leu Gly Leu  
 1 5 10 15  
 Pro Gln Tyr Arg Ser Tyr Phe Met Glu Cys Leu Val Asp Ala Arg Met  
 20 25 30  
 Leu Asp His Leu Thr Lys Lys Asp Leu Arg Val His Leu Lys Met Val  
 35 40 45  
 Asp Ser Phe His Arg Thr Ser Leu Gln Tyr Gly Ile Met Cys Leu Lys  
 50 55 60  
 Arg Leu Asn Tyr Asp Arg Lys Glu Leu Glu Lys Arg Arg Glu Glu Ser  
 65 70 75 80  
 Gln His Glu Ile Lys Asp Val Leu Val Trp Thr Asn Asp Gln Val Val  
 85 90 95  
 His Trp Val Gln Ser Ile Gly Leu Arg Asp Tyr Ala Gly Asn Leu His

|   |     |     |     |
|---|-----|-----|-----|
| 100   | 105 | 110 |     |
| Glu Ser Gly Val His Gly Ala Leu Leu Ala Leu Asp Glu Asn Phe Asp |     |     |     |
| 115   | 120 | 125 |     |
| His Asn Thr Leu Ala Leu Ile Leu Gln Ile Pro Thr Gln Asn Thr Gln |     |     |     |
| 130   | 135 | 140 |     |
| Ala Arg Gln Val Met Glu Arg Glu Phe Asn Asn Leu Leu Ala Leu Gly |     |     |     |
| 145   | 150 | 155 | 160 |
| Thr Asp Arg Lys Leu Asp Asp Gly Asp Asp Lys Val Phe Arg Arg Ala |     |     |     |
| 165   | 170 | 175 |     |
| Pro Ser Trp Arg Lys Arg Phe Arg Pro Arg Glu His His Gly Arg Gly |     |     |     |
| 180   | 185 | 190 |     |
| Gly Met Leu Ser Ala Ser Ala Glu Thr Leu Pro Ala Gly Phe Arg Val |     |     |     |
| 195   | 200 | 205 |     |
| Ser Thr Leu Gly Thr Leu Gln Pro Pro Pro Ala Pro Pro Lys Lys Ile |     |     |     |
| 210   | 215 | 220 |     |
| Met Pro Glu Gly Glu   |     |     |     |
| 225   |     |     |     |

&lt;210&gt; 2329

&lt;211&gt; 170

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2329

|   |    |    |    |
|---|----|----|----|
| Met Asn Arg Leu Leu Phe Phe Lys Ser Gln Gly Leu Ala Leu Leu Pro |    |    |    |
| 1   | 5  | 10 | 15 |
| Arg Leu Lys Cys Ser Gly Ala Ile Ile Ala His Cys Asn Phe Glu Leu |    |    |    |
| 20  | 25 | 30 |    |

Leu Gly Ser Ser Asn Phe Pro Asp Leu Ala Ser Glu Arg Ala Gly Thr  
                   35                                  40                                  45  
 Thr Ala Phe Gly Thr Val Val Leu Ile Arg Leu Ser Asn His Ile Ala  
                   50                                  55                                  60  
 Met Leu Trp Asp Phe Trp Arg Arg Lys Gln Thr Ile Trp Ser Thr Arg  
                   65                                  70                                  75                                  80  
 Thr Leu Asn His His His Leu Val Ser Cys Ile Ser Phe Ile Ile Ile  
   85                                  90                                  95  
 Phe Glu Thr Glu Ser His Ser Val Thr Gln Ala Gly Val Gln Trp Cys  
   100                                  105                                  110  
 Asn Leu Ser Ser Leu Gln Pro Pro Pro Pro Gly Phe Lys Arg Phe Ser  
   115                                  120                                  125  
 Cys Leu Thr Leu Pro Thr Ser Trp Asp Tyr Met Gln Met Pro Pro Cys  
   130                                  135                                  140  
 Leu Ala Asn Phe Cys Ile Phe Ser Arg Asp Gly Val Ser Pro Tyr Trp  
   145                                  150                                  155                                  160  
 Pro Gly Trp Ser Arg Thr Pro Asp Cys Arg  
   165                                  170

&lt;210&gt; 2330

&lt;211&gt; 105

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2330

Met Pro Val Pro Gly Leu Pro Gln Arg Ala Glu Gln Val Cys Phe Ile  
                   1                                  5                                  10                                  15  
 Phe Gly Leu Leu Leu Leu Glu Cys Leu Thr Leu Phe Val Val Leu Phe

|     |     |     |     |     |     |
|-----|-----|-----|-----|-----|-----|
|     | 20  |     | 25  |     | 30  |
| Pro | Trp | Tyr | Leu | Ala | Pro |
|     |     |     |     |     | Ser |
|     |     |     |     |     | Gly |
|     |     |     |     |     | Cys |
|     |     |     |     |     | Phe |
|     |     |     |     |     | Ile |
|     |     |     |     |     | Ile |
|     |     |     |     |     | Cys |
|     |     |     |     |     | Gly |
|     |     |     |     |     | Leu |
|     |     |     |     |     | Asn |
|     | 35  |     | 40  |     | 45  |
| Val | Glu | Asp | Ser | Ala | Gly |
|     |     |     |     |     | Glu |
|     |     |     |     |     | Pro |
|     |     |     |     |     | Val |
|     |     |     |     |     | Glu |
|     |     |     |     |     | Val |
|     |     |     |     |     | Glu |
|     |     |     |     |     | Thr |
|     |     |     |     |     | Gly |
|     |     |     |     |     | Gly |
|     |     |     |     |     | Glu |
|     | 50  |     | 55  |     | 60  |
| Arg | Met | Leu | Leu | Gly | Cys |
|     |     |     |     |     | Gly |
|     |     |     |     |     | Asn |
|     |     |     |     |     | Gly |
|     |     |     |     |     | Phe |
|     |     |     |     |     | Leu |
|     |     |     |     |     | Lys |
|     |     |     |     |     | Cys |
|     |     |     |     |     | Trp |
|     |     |     |     |     | Asn |
|     |     |     |     |     | Phe |
|     | 65  |     | 70  |     | 75  |
| Phe | His | Gly | Pro | Leu | Ser |
|     |     |     |     |     | Ser |
|     |     |     |     |     | Val |
|     |     |     |     |     | Gly |
|     |     |     |     |     | Arg |
|     |     |     |     |     | Asn |
|     |     |     |     |     | Pro |
|     |     |     |     |     | Gln |
|     |     |     |     |     | Ala |
|     |     |     |     |     | Tyr |
|     |     |     |     |     | Pro |
|     |     |     |     |     |     |
|     | 85  |     | 90  |     | 95  |
| Val | Phe | Val | Phe | Gln | Asn |
|     |     |     |     |     | Tyr |
|     |     |     |     |     | Ser |
|     |     |     |     |     | Tyr |
|     |     |     |     |     |     |
|     | 100 |     | 105 |     |     |

&lt;210&gt; 2331

&lt;211&gt; 256

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2331

|     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| Met | Thr | Leu | Ser | Ala | Trp | Gly | Leu | Ser | Ser | Val | Thr | Leu | Ser | Ala | Trp |
|     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |
|     | 1   |     |     | 5   |     |     |     |     |     | 10  |     |     |     |     | 15  |
| Gly | Leu | Ser | Ser | Val | Thr | Leu | Ser | Ala | Trp | Gly | Leu | Ser | Ser | Val | Thr |
|     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |
|     |     |     |     | 20  |     |     |     |     |     | 25  |     |     |     |     | 30  |
| Leu | Ser | Ala | Trp | Gly | Leu | Ser | Ser | Val | Thr | Leu | Ser | Ala | Trp | Gly | Leu |
|     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |
|     |     |     |     | 35  |     |     |     |     |     | 40  |     |     |     |     | 45  |
| Ser | Ser | Val | Thr | Leu | Ser | Ala | Trp | Gly | Leu | Ser | Ser | Val | Thr | Leu | Ser |
|     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |
|     |     |     |     | 50  |     |     |     |     |     | 55  |     |     |     |     | 60  |
| Ala | Cys | Gly | Leu | Ser | Ser | Val | Thr | Leu | Ser | Ala | Trp | Gly | Leu | Ser | Ser |
|     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |
|     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |
|     |     |     |     | 65  |     |     |     |     |     | 70  |     |     |     |     | 75  |
|     |     |     |     |     |     |     |     |     |     |     |     |     |     |     | 80  |



|   |     |     |     |
|---|-----|-----|-----|
| Val Thr Leu Ser Ala Trp Gly Leu Ser Ser Val Thr Leu Ser Ala Trp |     |     |     |
|   | 85  | 90  | 95  |
| Gly Leu Ser Ser Val Thr Leu Ser Ala Trp Gly Leu Ser Ser Val Thr |     |     |     |
|   | 100 | 105 | 110 |
| Leu Ser Ala Cys Cys Leu Ser Ser Met Thr Leu Ser Ala Cys Gly Leu |     |     |     |
|   | 115 | 120 | 125 |
| Ser Ser Thr Thr Leu Phe Ala Cys Arg Leu Ser Ser Val Thr Val Ser |     |     |     |
|   | 130 | 135 | 140 |
| Thr Cys Ser Leu Ser Ser Val Thr Leu Ser Ala Cys Gly Leu Ser Arg |     |     |     |
|   | 145 | 150 | 155 |
| Val Thr Leu Ser Ala Cys Gly Leu Ser Ser Met Thr Pro Ser Ala Cys |     |     |     |
|   | 165 | 170 | 175 |
| Gly Leu Ser Arg Val Thr Leu Ser Ala Cys His Leu Ser Ser Met Thr |     |     |     |
|   | 180 | 185 | 190 |
| Val Ser Thr Cys Gly Leu Ser Ser Met Thr Leu Phe Ala Cys Gly Leu |     |     |     |
|   | 195 | 200 | 205 |
| Ser Ser Met Thr Leu Ser Ala Cys Arg Leu Ser Asn Val Thr Leu Ser |     |     |     |
|   | 210 | 215 | 220 |
| Asn Phe Pro Leu Ala Ser Ala Pro Gly Glu Val Ala Phe Ser Leu Pro |     |     |     |
|   | 225 | 230 | 235 |
| Cys Cys Leu Leu Phe Ser Cys Lys Val Ser Ser Asp Phe Leu Tyr Pro |     |     |     |
|   | 245 | 250 | 255 |

&lt;210&gt; 2332

&lt;211&gt; 255

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2332

|     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| Met | Pro | Val | Glu | Ser | Val | Gly | Ala | Met | Glu | Pro | Leu | Pro | Gly | Ala | Leu |
| 1   |     |     |     | 5   |     |     |     |     | 10  |     |     |     |     | 15  |     |
| Gln | Trp | Gly | Val | Gln | Ala | Thr | Leu | Glu | Arg | Gly | Arg | Gly | Pro | Leu | Trp |
|     |     |     | 20  |     |     |     |     | 25  |     |     |     |     | 30  |     |     |
| Arg | Arg | Leu | Pro | Gly | Ala | Met | Gly | Ser | Arg | Gln | Lys | Ala | Ala | Thr | Glu |
|     |     | 35  |     |     |     |     | 40  |     |     |     |     | 45  |     |     |     |
| Gly | Pro | Ala | Gln | Val | Arg | Ala | Ala | Arg | Pro | Lys | Thr | Leu | Tyr | Ser | Pro |
|     | 50  |     |     |     |     | 55  |     |     |     |     | 60  |     |     |     |     |
| Trp | Thr | Val | Pro | Thr | Ser | Ala | His | Thr | Ala | Val | Pro | Thr | Ser | Gly | Thr |
|     | 65  |     |     |     |     | 70  |     |     |     |     | 75  |     |     | 80  |     |
| Ala | Phe | Ser | Val | Cys | Arg | Asp | Pro | Ala | Ala | Gln | Ala | Ala | Ala | Val | Pro |
|     |     |     |     | 85  |     |     |     |     | 90  |     |     |     |     | 95  |     |
| Leu | Ala | Ser | Trp | Ser | Arg | Met | Gly | Ala | Val | Cys | Arg | Ser | Pro | Leu | Ala |
|     |     |     | 100 |     |     |     |     | 105 |     |     |     |     | 110 |     |     |
| Ala | Val | Ala | Ser | Pro | Val | Pro | Met | Pro | Leu | Gly | Ser | Trp | Pro | Arg | Pro |
|     |     | 115 |     |     |     |     | 120 |     |     |     |     | 125 |     |     |     |
| Arg | Arg | Cys | Ser | Trp | Thr | Ala | Lys | Thr | Ala | Pro | Val | Ser | Thr | Ser | Pro |
|     |     | 130 |     |     |     |     | 135 |     |     |     |     | 140 |     |     |     |
| Trp | Cys | Ala | His | Thr | Arg | Ser | Val | Gln | Ser | Leu | Gly | Leu | Gly | Gln | Pro |
|     | 145 |     |     |     |     | 150 |     |     |     |     | 155 |     |     | 160 |     |
| Gly | Ala | Val | Ala | Arg | Pro | Pro | Val | Val | Gly | Ala | Leu | Trp | Ser | Asp | Val |
|     |     |     |     | 165 |     |     |     |     | 170 |     |     |     |     | 175 |     |
| Gly | Leu | Val | Arg | Gly | Val | Leu | Gly | Trp | His | His | Ala | Arg | Pro | Arg | Thr |
|     |     |     | 180 |     |     |     |     | 185 |     |     |     | 190 |     |     |     |
| Gln | Ser | Asn | Gly | Arg | Ser | Val | Thr | Cys | Ser | Pro | Ala | Leu | Ser | Ala | Pro |
|     |     | 195 |     |     |     |     |     | 200 |     |     |     | 205 |     |     |     |
| Leu | Ala | Arg | Cys | Leu | Val | Pro | Val | Pro | Pro | His | Ala | Arg | Ala | Ser | Ala |
|     |     | 210 |     |     |     |     | 215 |     |     |     |     | 220 |     |     |     |

出証特 2 0 0 4 - 3 0 5 9 6 6 0

130

135

&lt;210&gt; 2334

&lt;211&gt; 134

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2334

Met Asn Phe Asp His Lys Asn Glu Thr Leu Ser Ile Ser Val Gln Pro

1

5

10

15

Gly Glu Gly Asn Lys Ala Ala Phe Asn Asp Met Arg Ala Leu Ser Gly

20

25

30

Gly Glu Arg Ser Phe Ser Thr Val Cys Phe Ile Leu Ser Leu Trp Ser

35

40

45

Ile Ala Glu Ser Pro Phe Arg Cys Leu Asp Glu Phe Asp Val Tyr Met

50

55

60

Asp Met Val Asn Arg Arg Ile Ala Met Asp Leu Ile Leu Lys Met Ala

65

70

75

80

Asp Ser Gln Arg Phe Arg Gln Phe Ile Leu Leu Thr Pro Gln Ser Met

85

90

95

Ser Ser Leu Pro Ser Ser Lys Leu Ile Arg Ile Leu Arg Met Ser Asp

100

105

110

Pro Glu Arg Gly Gln Thr Thr Leu Pro Phe Arg Pro Val Thr Gln Glu

115

120

125

Glu Asp Asp Asp Gln Arg

130

&lt;210&gt; 2335

&lt;211&gt; 108

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2335

```

Met Arg Lys Gly Ile Gly Thr His Arg Ser Asp Asp Asn Gln Ser Pro
  1             5             10             15
Leu Met Met Pro Ser Val Thr Gln Gly Ser Pro Gln Pro Ala Gln Pro
             20             25             30
Asp Ser Pro Ala Cys Phe Ser Thr Ala Tyr Leu Gln Gln Ser Asn Cys
             35             40             45
Ile Phe Val Thr Ala Asn Tyr Ile Pro Phe Ala Phe Lys Cys Leu His
             50             55             60
Phe Ser Tyr Cys Thr Gly Tyr Leu Phe Leu Ser Ala Gln His Pro Val
             65             70             75             80
Ser Pro Pro Phe Gly Ser Ser Pro Ser Gln Phe His Val Leu Asn Pro
             85             90             95
Phe Leu Leu Leu Val Lys Ile Ile Phe Cys Phe Val
             100             105

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&lt;210&gt; 2336

&lt;211&gt; 142

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2336

```

Met Gly Pro Leu Thr Arg Trp Ser Arg Ser Asn Glu Val Thr Arg Ala

```

|   |     |     |    |
|---|-----|-----|----|
| 1   | 5   | 10  | 15 |
| Ser Pro Asn Pro Ile Cys Trp Cys Asn Tyr Lys Glu Ile Arg Thr Gln |     |     |    |
| 20  | 25  | 30  |    |
| Thr Cys Thr Glu Gly Arg Pro Ser Thr Ser Gln Gly Gly Arg Pro Pro |     |     |    |
| 35  | 40  | 45  |    |
| Gly Asn Gln Pro Cys Gln Gln Met Met Val Cys Pro Phe Gly Ala Lys |     |     |    |
| 50  | 55  | 60  |    |
| Pro Gln Glu Ala Ser Val Leu Ser Leu Thr Leu Gly Ser Leu Leu Ser |     |     |    |
| 65  | 70  | 75  | 80 |
| Arg Val Arg Trp Leu Gly Leu Ala Cys Trp Arg Leu Thr Gly Pro Trp |     |     |    |
| 85  | 90  | 95  |    |
| Gly Lys Ser Ser Trp Ser Lys Val Phe Trp Ala Ser Gln His Asn Pro |     |     |    |
| 100   | 105 | 110 |    |
| Gln Pro Thr Val Gln Ala Val Asp Arg Tyr Arg Ser Lys Ser Ser Gln |     |     |    |
| 115   | 120 | 125 |    |
| Asp Gln Pro Asn Ser Asp Gln Gln Asn Cys Leu Ala Gly Ser         |     |     |    |
| 130   | 135 | 140 |    |

&lt;210&gt; 2337

&lt;211&gt; 123

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2337

|   |    |    |    |
|---|----|----|----|
| Met Ser Ala Cys Pro Ala Gly Thr Ala Gln Arg Pro Arg Pro Gly Arg |    |    |    |
| 1   | 5  | 10 | 15 |
| Thr Leu Arg Val Thr Thr Leu Pro Thr Ala Pro Leu Ala Ile Leu Pro |    |    |    |
| 20  | 25 | 30 |    |

Asn His Ser Leu Pro Lys Ile Pro Pro Thr Val Thr Pro His Asp Asn  
 35 40 45  
 Pro Gly Arg Leu Ser Ala Val Ala Pro Ala Pro Gln Pro Arg Ala Leu  
 50 55 60  
 Ser Pro Pro Arg Phe Cys Pro Pro Pro Leu Ser Ser Leu Cys Thr Ser  
 65 70 75 80  
 Pro Pro Trp Leu Pro Leu Ser Pro Glu Leu Thr Val Asp Ala Gly Phe  
 85 90 95  
 Phe Gln Thr Pro Leu Gly Asn Thr Glu Trp Lys Arg Gly Ser Val Arg  
 100 105 110  
 Lys Cys Leu Val Glu Cys Arg His Cys Gly Ile  
 115 120

&lt;210&gt; 2338

&lt;211&gt; 120

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2338

Met Gly Leu Leu Ala Leu Pro Phe Phe Ala Ile Leu Val Met Asp Arg  
 1 5 10 15  
 Gly Trp Pro Arg Gly Thr Trp Leu Pro Val Thr Ser Gly Arg Leu His  
 20 25 30  
 Ala Gly Gln Gly Arg Val Ala Leu Pro Leu Ala Gly Gly Gly Met Arg  
 35 40 45  
 Leu Pro Arg Gly Thr Gln Val Ser Leu His Leu Ala Pro Tyr Pro Val  
 50 55 60  
 Ser Phe Ala Val Phe Met Cys Ser Asp Ala Leu Pro Leu Gly Ala Ser

|   |     |     |     |
|---|-----|-----|-----|
| 65  | 70  | 75  | 80  |
| Lys Leu Gln Cys Pro Leu Pro Pro Gly Arg Gly Asp Pro Gln Ala Pro |     |     |     |
|   | 85  | 90  | 95  |
| Ser Ala Gln Arg Cys Thr Cys Leu Val Ala Leu Leu Leu Pro Gly Thr |     |     |     |
|   | 100 | 105 | 110 |
| Val Asp Leu Ser Val Cys Leu Phe                                 |     |     |     |
|   | 115 | 120 |     |

&lt;210&gt; 2339

&lt;211&gt; 273

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2339

|   |     |     |     |
|---|-----|-----|-----|
| Met Glu Gly Glu Ile Trp Gly Leu Ala Thr His Pro Ser Lys Asp Leu |     |     |     |
| 1   | 5   | 10  | 15  |
| Phe Ile Ser Ala Ser Asn Asp Gly Thr Ala Arg Ile Trp Asp Leu Ala |     |     |     |
|   | 20  | 25  | 30  |
| Asp Lys Lys Leu Leu Asn Lys Val Ser Leu Gly His Ala Ala Arg Cys |     |     |     |
|   | 35  | 40  | 45  |
| Ala Ala Tyr Ser Pro Asp Gly Glu Met Val Ala Ile Gly Met Lys Asn |     |     |     |
|   | 50  | 55  | 60  |
| Gly Glu Phe Val Ile Leu Leu Val Asn Ser Leu Lys Val Trp Gly Lys |     |     |     |
|   | 65  | 70  | 75  |
| Lys Arg Asp Arg Lys Ser Ala Ile Gln Asp Ile Arg Ile Ser Pro Asp |     |     |     |
|   | 85  | 90  | 95  |
| Asn Arg Phe Leu Ala Val Gly Ser Ser Glu His Thr Val Asp Phe Tyr |     |     |     |
|   | 100 | 105 | 110 |



Asp Leu Thr Gln Gly Thr Asn Leu Asn Arg Ile Gly Tyr Cys Lys Asp  
115 120 125  
Ile Pro Ser Phe Val Ile Gln Met Asp Phe Ser Ala Asp Gly Lys Tyr  
130 135 140  
Ile Gln Val Ser Thr Gly Ala Tyr Lys Arg Gln Val His Glu Val Pro  
145 150 155 160  
Leu Gly Lys Gln Val Thr Glu Ala Val Val Ile Glu Lys Ile Thr Trp  
165 170 175  
Ala Ser Trp Thr Ser Val Leu Gly Asp Glu Val Ile Gly Ile Trp Pro  
180 185 190  
Arg Asn Ala Asp Lys Ala Asp Val Asn Cys Ala Cys Val Thr His Ala  
195 200 205  
Gly Leu Asn Ile Val Thr Gly Asp Asp Phe Gly Leu Val Lys Leu Phe  
210 215 220  
Asp Phe Pro Cys Thr Glu Lys Phe Ala Lys His Lys Arg Tyr Phe Gly  
225 230 235 240  
His Ser Ala His Val Thr Asn Ile Arg Phe Ser Tyr Asp Asp Lys Tyr  
245 250 255  
Val Val Ser Thr Gly Gly Asp Asp Cys Ser Val Phe Val Trp Arg Cys  
260 265 270  
Leu

&lt;210&gt; 2340

&lt;211&gt; 103

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2340

Met Gln Gln Asn Glu Ala Ala Gln Gln Glu Val Pro Phe Gly Pro Gln  
 1 5 10 15  
 Thr Thr Ala Val Leu Trp Asp His Lys Gly Gly Val Ala His Ala Val  
 20 25 30  
 Asn His Gln Ala Asn Gly Ser Val His Leu Leu His Gln Asp Gly Val  
 35 40 45  
 Pro Leu Val Val Ile His Met Ala Leu Gly Gly Lys Val Ser Ile Glu  
 50 55 60  
 Thr Thr Gln Thr Val Val Phe Gln Leu Gly His Ser Thr Gly Gln Leu  
 65 70 75 80  
 Gln Arg Lys Ser Lys Gln Pro Ser Ala Lys Pro Arg Ser Pro Cys Lys  
 85 90 95  
 Pro Ala Lys Arg Leu Pro Val  
 100

&lt;210&gt; 2341

&lt;211&gt; 127

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2341

Met Gly Val Pro Arg Ser Phe Arg Gly Ser Pro Arg Val Pro Pro Pro  
 1 5 10 15  
 Gly Pro Pro Arg Trp Thr Ser Leu Arg Pro Leu Pro Ser Leu Asp His  
 20 25 30  
 Ile Ser Ala Pro Thr Val Pro Asp Ile Leu Ala Leu His Ala Thr Ser  
 35 40 45

Arg Pro Met Ile Met Pro Gln Phe Pro Ser Pro Leu Arg Gln Pro Ser  
 50 55 60  
 Pro Cys Arg Leu Pro Pro Ser Glu Arg Val Gln Leu Gln Leu Ser Pro  
 65 70 75 80  
 Gly Ser Leu Pro Ala Ser Gly Pro His Leu Thr Pro Ala Ser Arg Phe  
 85 90 95  
 Pro Leu Pro Ala Arg Leu Asn Pro Ala Ala Ser Ala Pro Cys Leu Val  
 100 105 110  
 Pro Ser Ala Trp Pro Leu Pro Pro Ala Ala Gly Ser Gly Arg Arg  
 115 120 125

&lt;210&gt; 2342

&lt;211&gt; 289

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2342

Met Gly Cys Ile Gly Ser Arg Thr Val Gly Asn Glu Val Ile Ala Val  
 1 5 10 15  
 Asp Trp Lys Gly Leu Lys Asp Val Asp Gln Ile Asn Met Asp Ser Thr  
 20 25 30  
 Ser Ser Leu His Gly Ser Ser Leu His Arg Pro Ser Thr Glu Gln Thr  
 35 40 45  
 Arg Thr Asp Phe Ser Trp Asp Gly Ile Asn Leu Ser Met Glu Asp Thr  
 50 55 60  
 Thr Ser Ile Leu Pro Lys Leu Lys Arg Asn Ser Asn Ala Tyr Gly Ile  
 65 70 75 80  
 Gly Ala Leu Ala Lys Ser Ser Phe Ser Gly Ile Ser Arg Ser Met Lys

|   |     |     |
|---|-----|-----|
| 85  | 90  | 95  |
| Asp His Val Thr Lys Pro Thr Ala Met Gly Gln Gly Arg Val Ala His |     |     |
| 100   | 105 | 110 |
| Met Ile Glu Trp Gln Gly Trp Gly Lys Thr Pro Ala Val Gln Pro Gln |     |     |
| 115   | 120 | 125 |
| His Ser His Glu Ser Val Arg Arg Asp Thr Asp Ala Tyr Ser Asp Leu |     |     |
| 130   | 135 | 140 |
| Ser Asp Gly Glu Lys Glu Ala Arg Phe Leu Ala Gly Val Met Glu Gln |     |     |
| 145   | 150 | 155 |
| 160   |     |     |
| Phe Ala Ile Ser Glu Ala Thr Leu Met Ala Trp Ser Ser Met Asp Gly |     |     |
| 165   | 170 | 175 |
| Glu Asp Met Ser Val Asn Ser Thr Gln Glu Pro Leu Gly Cys Asn Tyr |     |     |
| 180   | 185 | 190 |
| Ser Asp Asn Tyr Gln Glu Leu Met Asp Ser Gln Asp Ala Leu Ala Gln |     |     |
| 195   | 200 | 205 |
| Ala Pro Met Asp Gly Leu Thr Leu Thr Cys Pro Arg Val Cys Thr Val |     |     |
| 210   | 215 | 220 |
| Trp Gly Arg Gln Met Pro Gly Lys Pro Ala Ile Ser Pro Ser Leu Pro |     |     |
| 225   | 230 | 235 |
| 240   |     |     |
| Leu Arg Pro Gln Asp Pro Ile Leu Gly Leu His Leu Met Thr His Asn |     |     |
| 245   | 250 | 255 |
| Pro Ala Cys Met Lys Trp Asp Leu Pro Asn Gln Leu Gln Asp Thr Leu |     |     |
| 260   | 265 | 270 |
| Leu Trp Ser Leu His Leu Cys Trp Gly Glu Thr Leu Thr Gly Leu Arg |     |     |
| 275   | 280 | 285 |
| Gly   |     |     |

&lt;210&gt; 2343

&lt;211&gt; 118

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2343

Met Cys Gln His Glu Gly Arg Leu Gln Phe Ile His Glu Arg Gln Glu

1 5 10 15

Lys Glu Asn Ser Asn Leu Glu Ser Ser Val Gly His Gln Ala Leu Thr

20 25 30

Phe Pro His Leu Ala His Tyr Pro Val Lys Ala Val Ala Ala His Leu

35 40 45

Val Ala Leu His Gly Thr Leu Pro Lys Ala Ser Ser Ser Ile Leu Gly

50 55 60

Leu Gln Arg Ile Gln Val Pro Ser Ile Gln Trp Gly Ser Ser Thr Ser

65 70 75 80

Glu Val Pro Leu Pro Pro Ser Ser Ala Ser Cys Leu Ala Ile Pro Ser

85 90 95

Ile Pro Phe Gly Asp Asp Tyr Leu Glu Asn Lys Glu Arg Tyr Gly Met

100 105 110

Gly Phe Pro Ile Val Cys

115

&lt;210&gt; 2344

&lt;211&gt; 1005

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2344

|     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| Met | Glu | Lys | Gln | Arg | Ala | Leu | Val | Ala | Ala | Lys | Asp | Gly | Asp | Val | Ala |
| 1   |     |     |     | 5   |     |     |     |     | 10  |     |     |     |     | 15  |     |
| Thr | Leu | Glu | Arg | Leu | Leu | Glu | Ala | Gly | Ala | Leu | Gly | Pro | Gly | Ile | Thr |
|     |     |     | 20  |     |     |     |     | 25  |     |     |     |     | 30  |     |     |
| Asp | Ala | Leu | Gly | Ala | Gly | Leu | Val | His | His | Ala | Thr | Arg | Ala | Gly | His |
|     |     | 35  |     |     |     | 40  |     |     |     |     |     | 45  |     |     |     |
| Leu | Asp | Cys | Val | Lys | Phe | Leu | Val | Gln | Arg | Ala | Gln | Leu | Pro | Gly | Asn |
|     | 50  |     |     |     |     | 55  |     |     |     |     | 60  |     |     |     |     |
| Gln | Arg | Ala | His | Asn | Gly | Ala | Thr | Pro | Ala | His | Asp | Ala | Ala | Ala | Thr |
| 65  |     |     |     | 70  |     |     |     |     | 75  |     |     |     |     | 80  |     |
| Gly | Ser | Leu | Ala | Glu | Leu | Cys | Trp | Leu | Val | Arg | Glu | Gly | Gly | Cys | Gly |
|     |     |     | 85  |     |     |     |     | 90  |     |     |     |     | 95  |     |     |
| Leu | Gln | Asp | Gln | Asp | Ala | Ser | Gly | Val | Ser | Pro | Leu | His | Leu | Ala | Ala |
|     |     | 100 |     |     |     |     | 105 |     |     |     |     | 110 |     |     |     |
| Arg | Phe | Gly | His | Pro | Val | Leu | Val | Glu | Trp | Leu | Leu | His | Glu | Gly | His |
|     | 115 |     |     |     |     | 120 |     |     |     |     | 125 |     |     |     |     |
| Ser | Ala | Thr | Leu | Glu | Thr | Arg | Glu | Gly | Ala | Arg | Pro | Leu | His | His | Ala |
|     | 130 |     |     |     |     | 135 |     |     |     |     | 140 |     |     |     |     |
| Ala | Val | Ser | Gly | Asp | Leu | Thr | Cys | Leu | Lys | Leu | Leu | Thr | Ala | Ala | His |
| 145 |     |     |     | 150 |     |     |     |     | 155 |     |     |     | 160 |     |     |
| Gly | Ser | Ser | Val | Asn | Arg | Arg | Thr | Arg | Ser | Gly | Ala | Ser | Pro | Leu | Tyr |
|     |     |     | 165 |     |     |     |     | 170 |     |     |     |     | 175 |     |     |
| Leu | Ala | Cys | Gln | Glu | Gly | His | Leu | His | Leu | Ala | Gln | Phe | Leu | Val | Lys |
|     |     | 180 |     |     |     |     | 185 |     |     |     |     | 190 |     |     |     |
| Asp | Cys | Gly | Ala | Asp | Val | His | Leu | Arg | Ala | Leu | Asp | Gly | Met | Ser | Ala |
|     | 195 |     |     |     |     |     | 200 |     |     |     |     | 205 |     |     |     |
| Leu | His | Ala | Ala | Ala | Ala | Arg | Gly | His | Tyr | Ser | Leu | Val | Val | Trp | Leu |
|     | 210 |     |     |     |     | 215 |     |     |     |     |     | 220 |     |     |     |

Val Thr Phe Thr Asp Ile Gly Leu Thr Ala Arg Asp Asn Glu Gly Ala  
225 230 235 240  
Thr Ala Leu His Phe Ala Ala Arg Gly Gly His Thr Pro Ile Leu Asp  
245 250 255  
Arg Leu Leu Leu Met Gly Thr Pro Ile Leu Arg Asp Ser Trp Gly Gly  
260 265 270  
Thr Pro Leu His Asp Ala Ala Glu Asn Gly Gln Met Glu Cys Cys Gln  
275 280 285  
Thr Leu Val Ser His His Val Asp Pro Ser Leu Arg Asp Glu Asp Gly  
290 295 300  
Tyr Thr Ala Ala Asp Leu Ala Glu Tyr His Gly His Arg Asp Cys Ala  
305 310 315 320  
Gln Tyr Leu Arg Glu Val Ala Gln Pro Val Pro Leu Leu Met Thr Pro  
325 330 335  
Pro Pro Pro Pro Phe Pro Pro Pro Pro Leu Leu Ala Thr Arg Arg Ser  
340 345 350  
Leu Glu Asp Gly Arg Arg Gly Gly Pro Gly Pro Gly Asn Pro Ser Pro  
355 360 365  
Met Ser Leu Ser Pro Ala Trp Pro Gly His Pro Asp Gln Pro Leu Pro  
370 375 380  
Arg Glu Gln Met Thr Ser Pro Ala Pro Pro Arg Ile Ile Thr Ser Ala  
385 390 395 400  
Thr Ala Asp Pro Glu Gly Thr Glu Thr Ala Leu Ala Gly Asp Thr Ser  
405 410 415  
Asp Gly Leu Ala Ala Leu Gln Leu Asp Gly Leu Pro Ser Gly Asp Ile  
420 425 430  
Asp Gly Leu Val Pro Thr Arg Asp Glu Arg Gly Gln Pro Ile Pro Glu  
435 440 445  
Trp Lys Arg Gln Val Met Val Arg Lys Leu Gln Ala Arg Leu Gly Ala

450                                      455                                      460  
Glu Ser Ser Ala Glu Ala Gln Asp Asn Gly Gly Ser Ser Gly Pro Thr  
465                                      470                                      475                                      480  
Glu Gln Ala Ala Trp Arg Tyr Ser Gln Thr His Gln Ala Ile Leu Gly  
   485                                      490                                      495  
Pro Phe Gly Glu Leu Leu Thr Glu Asp Asp Leu Val Tyr Leu Glu Lys  
   500                                      505                                      510  
Gln Ile Ala Asp Leu Gln Leu Arg Arg Arg Cys Gln Glu Tyr Glu Ser  
   515                                      520                                      525  
Glu Leu Gly Arg Leu Ala Ala Glu Leu Gln Ala Leu Leu Pro Glu Pro  
   530                                      535                                      540  
Leu Val Ser Ile Thr Val Asn Ser His Phe Leu Pro Arg Ala Pro Gly  
545                                      550                                      555                                      560  
Leu Glu Val Glu Glu Ala Ser Ile Pro Ala Ala Glu Pro Ala Gly Ser  
   565                                      570                                      575  
Ala Glu Ala Ser Glu Val Ala Pro Gly Val Gln Pro Leu Pro Phe Trp  
   580                                      585                                      590  
Cys Ser His Ile Ser Arg Leu Val Arg Ser Leu Ser Leu Leu Lys  
   595                                      600                                      605  
Gly Met His Gly Leu Val Gln Gly Asp Glu Lys Pro Ser Thr Arg Pro  
   610                                      615                                      620  
Leu Gln Asp Thr Cys Arg Glu Ala Ser Ala Ser Pro Pro Arg Ser Glu  
625                                      630                                      635                                      640  
Ala Gln Arg Gln Ile Gln Glu Trp Gly Val Ser Val Arg Thr Leu Arg  
   645                                      650                                      655  
Gly Asn Phe Glu Ser Ala Ser Gly Pro Leu Cys Gly Phe Asn Pro Gly  
   660                                      665                                      670  
Pro Cys Glu Pro Gly Ala Gln His Arg Gln Cys Leu Ser Gly Cys Trp  
   675                                      680                                      685



Pro Ala Leu Pro Lys Pro Arg Ser Gly Leu Ala Ser Gly Glu Pro Arg  
690 695 700

Pro Gly Asp Thr Glu Glu Ala Ser Asp Ser Gly Ile Ser Cys Glu Glu  
705 710 715 720

Val Pro Pro Glu Ala Gly Ala Ala Ala Gly Pro Asp Leu Ala Ser Leu  
725 730 735

Arg Lys Glu Arg Ile Ile Met Leu Phe Leu Ser His Trp Arg Arg Ser  
740 745 750

Ala Tyr Thr Pro Ala Leu Lys Thr Ala Ala Cys Arg Thr Leu Gly Ala  
755 760 765

Arg His Ala Gly Leu Arg Gly Gln Glu Ala Ala Arg Ser Pro Gly Pro  
770 775 780

Pro Ser Pro Pro Ser Glu Gly Pro Arg Leu Gly His Leu Trp Gln Gln  
785 790 795 800

Arg Ser Thr Ile Thr His Leu Leu Gly Asn Trp Lys Ala Ile Met Ala  
805 810 815

His Val Pro Ala Arg Gln Leu Arg Arg Leu Ser Arg Gln Pro Arg Gly  
820 825 830

Ala Leu Ser Pro Glu Gln Phe Leu Pro His Val Asp Gly Ala Pro Val  
835 840 845

Pro Tyr Ser Ser Leu Ser Leu Asp Leu Phe Met Leu Gly Tyr Phe Gln  
850 855 860

Leu Leu Glu Cys Asp Leu Pro Ala Glu Glu Arg Lys Leu Arg His Leu  
865 870 875 880

Leu Cys Phe Glu Val Phe Glu His Leu Gly Thr His Gly Trp Glu Ala  
885 890 895

Val Arg Ala Phe His Lys Ala Val Thr Asp Glu Val Ala Ala Gly Arg  
900 905 910

Arg Ala Trp Thr Asp Gly Phe Glu Asp Ile Lys Ala Arg Phe Phe Gly

|   |      |      |
|---|------|------|
| 915   | 920  | 925  |
| Ser Ser Gln Arg Pro Ala Trp Asp Thr Glu Pro Gly Arg Lys Ser Gly |      |      |
| 930   | 935  | 940  |
| Leu Thr Leu Leu Gly Pro Leu Pro His Ala Thr Val Pro Cys Ser Gly |      |      |
| 945   | 950  | 955  |
| Pro Glu Pro Thr Ala Gln Arg Leu Gly Ser Arg Ser Gln Gln Gly Ser |      |      |
| 965   | 970  | 975  |
| Phe Asn Gly Glu Asp Ile Cys Gly Tyr Ile Asn Arg Ser Phe Ala Phe |      |      |
| 980   | 985  | 990  |
| Trp Lys Glu Lys Glu Ala Glu Met Phe Asn Phe Gly Glu             |      |      |
| 995   | 1000 | 1005 |

&lt;210&gt; 2345

&lt;211&gt; 145

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2345

|   |
|---|
| Met Gly Pro Trp Pro Arg Asp Trp Leu Gly Lys Gly Trp Arg Leu Gly |
| 1 5 10 15   |
| Ser Cys Glu Ala Arg Ala Gly Ala Lys Glu Val Ser Val Ile Arg His |
| 20 25 30  |
| Gly Ala Pro Asn Pro Ala Gln Ser His Leu His Val Gln Ala Arg Ala |
| 35 40 45  |
| Gln Val His Ser Glu Asp Gly His Ser Leu Pro Pro Val Val Asp Gly |
| 50 55 60  |
| Glu Asp Glu Val Leu Ser Leu Leu Val Phe Val Gln Asp Ser Gln Glu |
| 65 70 75 80   |

Cys Cys Arg Gln Ala Val Gln Gly Arg Gln Gly Arg Gly Val Thr Trp  
                     85                    90                    95  
 Gly Leu Gly Leu Pro Ser Tyr His Leu Arg Thr Leu Leu Ser Pro Val  
                     100                    105                    110  
 Cys Val Pro Ala Arg Asp Gln Arg Ala Pro Arg Lys Cys Cys Glu Ala  
                     115                    120                    125  
 Val Leu Ala Cys Pro Leu Val Glu Thr Leu Val Thr Thr Leu Leu Thr  
                     130                    135                    140  
 Arg  
 145

<210> 2346

<211> 173

<212> PRT

<213> Homo sapiens

<400> 2346

Met Met Cys Met Met Thr Gly Ser Asp Val Arg Asp Asp Arg Leu Arg  
           1                    5                    10                    15  
 Arg Cys Val Ala Thr Gly Ser Asp His Val Cys Asp Asp Arg Leu Arg  
                     20                    25                    30  
 Cys Ala Leu Met Thr Gly Ser Asp Val Cys Asp Asp Trp Leu Arg Cys  
                     35                    40                    45  
 Ser Leu Met Thr Ser Ser Asp Val Cys Asp Asp Pro Leu Ser Ile Gln  
                     50                    55                    60  
 Cys Ala Ile Ala Leu Ala Arg Ser Arg Ser Arg Leu Pro Thr Arg Ser  
                     65                    70                    75                    80  
 Gln Leu Pro Ala Val Pro Ala Ser Ala Ala Arg Trp Arg Gln Gly Pro

|     |     |     |     |     |     |
|-----|-----|-----|-----|-----|-----|
|     | 85  |     | 90  |     | 95  |
| His | Glu | Arg | Arg | Ala | Phe |
| Pro | Cys | Gly | Cys | Ser | Leu |
| Ala | Gly | Ser | Pro |     |     |
| 100 |     | 105 |     | 110 |     |
| Leu | Arg | Gly | Leu | Leu | Arg |
| Pro | Ala | Ser | Pro | Ser | Gln |
| Cys | Ile | Val | Thr |     |     |
| 115 |     | 120 |     | 125 |     |
| Thr | Thr | Leu | Leu | Ser | Ser |
| Asn | Lys | Gln | Val | Arg | Cys |
| Arg | Trp | Lys | Cys |     |     |
| 130 |     | 135 |     | 140 |     |
| Gly | Val | Gly | Val | Trp | Val |
| Gly | Glu | Val | Pro | Gln | Ala |
| Ser | Leu | Ser | Pro |     |     |
| 145 |     | 150 |     | 155 |     |
| 160 |     |     |     |     |     |
| Cys | Ala | Ala | Ala | Gly | Gly |
| Tyr | Ala | Gly | Gly | Thr | Glu |
| Leu |     |     |     |     |     |
| 165 |     | 170 |     |     |     |

&lt;210&gt; 2347

&lt;211&gt; 116

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2347

|     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| Met | Gly | Phe | His | His | Val | Gly | Gln | Ala | Gly | Leu | Glu | Leu | Leu | Thr | Ser |
| 1   |     |     |     |     | 5   |     |     |     |     | 10  |     |     |     |     | 15  |
| Gly | Asp | Leu | Pro | Leu | Leu | Ala | Ser | Gln | Ser | Ala | Gly | Ile | Thr | Val | Met |
|     |     |     |     |     | 20  |     |     |     |     | 25  |     |     |     |     | 30  |
| Ser | His | Arg | Thr | Trp | Pro | Gln | Thr | Phe | Phe | Phe | Leu | Ser | Lys | Glu | Ile |
|     |     |     |     |     | 35  |     |     |     |     | 40  |     |     |     |     | 45  |
| Val | Ser | Trp | Ile | Thr | Ser | His | Lys | Ala | Ser | Gln | Tyr | Val | Lys | Gln | Ile |
|     |     |     |     |     | 50  |     |     |     |     | 55  |     |     |     |     | 60  |
| Ile | Val | Leu | Glu | Val | Thr | Thr | Trp | Asn | Ser | Val | His | Gly | Asp | Ser | Ser |
|     |     |     |     |     | 65  |     |     |     |     | 70  |     |     |     |     | 75  |
|     |     |     |     |     |     |     |     |     |     |     |     |     |     |     | 80  |

Pro Cys Thr Pro His Thr Glu Thr Leu Gln Leu Met Leu Pro Thr Ser  
                             85                            90                            95  
 Val Ser Lys Glu Thr Leu Asp Lys Ser Ser Pro Phe Ile His Arg Trp  
                             100                            105                            110  
 Arg His Tyr Cys  
                             115

<210> 2348

<211> 122

<212> PRT

<213> Homo sapiens

<400> 2348

Met Thr Cys Ser Lys Thr Lys Thr Asn Pro Thr Phe Lys Cys Lys Thr  
   1                            5                            10                            15  
 Asp Phe Lys Ala Ile Phe Phe Phe Leu Phe Phe Ile Glu Thr Glu Ser  
                             20                            25                            30  
 Arg Ser Val Ala Gln Ala Gly Val Gln Trp Cys Asp Leu Ser Ser Leu  
                             35                            40                            45  
 Gln Pro Pro Pro Pro Gly Phe Lys Arg Phe Ser Cys Leu Ser Leu Pro  
                             50                            55                            60  
 Ser Ser Trp Asp Tyr Arg Cys Pro Pro Pro Arg Leu Val Thr Phe Cys  
   65                            70                            75                            80  
 Ile Phe Ser Arg Asp Arg Val Ser Ser Cys Trp Pro Gly Gly Leu Lys  
                             85                            90                            95  
 Leu Leu Thr Ser Gly Asp Leu Pro Ala Ser Ala Ser Gln Ser Ala Gly  
                             100                            105                            110  
 Val Thr Gly Met Ser His His Thr Trp Pro

115

120

&lt;210&gt; 2349

&lt;211&gt; 1163

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2349

Met Glu Arg Gly Ala Arg Glu Met Ala Ala Pro Gly Asp Cys Pro Ala

1 5 10 15

Gly Lys Ala Ala Gly Thr Ser Arg Pro Thr Arg Ser Leu Ser Thr Ala

20 25 30

Gln Leu Val Gln Pro Ser Gly Gly Leu Gln Ala Ser Val Ile Ser Asn

35 40 45

Ile Val Leu Met Lys Gly Gln Ala Lys Gly Leu Gly Phe Ser Ile Val

50 55 60

Gly Gly Lys Asp Ser Ile Tyr Gly Pro Ile Gly Ile Tyr Val Lys Thr

65 70 75 80

Ile Phe Ala Gly Gly Ala Ala Ala Ala Asp Gly Arg Leu Gln Glu Gly

85 90 95

Asp Glu Ile Leu Glu Leu Asn Gly Glu Ser Met Ala Gly Leu Thr His

100 105 110

Gln Asp Ala Leu Gln Lys Phe Lys Gln Ala Lys Lys Gly Leu Leu Thr

115 120 125

Leu Thr Val Arg Thr Arg Leu Thr Ala Pro Pro Ser Leu Cys Ser His

130 135 140

Leu Ser Pro Pro Leu Cys Arg Ser Leu Ser Ser Ser Thr Cys Ile Thr

145 150 155 160

Lys Asp Ser Ser Ser Phe Ala Leu Glu Ser Pro Ser Ala Pro Ile Ser  
                                 165                                170                                175  
 Thr Ala Lys Pro Asn Tyr Arg Ile Met Val Glu Val Ser Leu Gln Lys  
                                 180                                185                                190  
 Glu Ala Gly Val Gly Leu Gly Ile Gly Leu Cys Ser Val Pro Tyr Phe  
                                 195                                200                                205  
 Gln Cys Ile Ser Gly Ile Phe Val His Thr Leu Ser Pro Gly Ser Val  
                                 210                                215                                220  
 Ala His Leu Asp Gly Arg Leu Arg Cys Gly Asp Glu Ile Val Glu Ile  
 225                                230                                235                                240  
 Ser Asp Ser Pro Val His Cys Leu Thr Leu Asn Glu Val Tyr Thr Ile  
                                 245                                250                                255  
 Leu Ser His Cys Asp Pro Gly Pro Val Pro Ile Ile Val Ser Arg His  
                                 260                                265                                270  
 Pro Asp Pro Gln Val Ser Glu Gln Gln Leu Lys Glu Ala Val Ala Gln  
                                 275                                280                                285  
 Ala Val Glu Asn Thr Lys Phe Gly Lys Glu Arg His Gln Trp Ser Leu  
                                 290                                295                                300  
 Glu Gly Val Lys Arg Leu Glu Ser Ser Trp His Gly Arg Pro Thr Leu  
 305                                310                                315                                320  
 Glu Lys Glu Arg Glu Lys Asn Ser Ala Pro Pro His Arg Arg Ala Gln  
                                 325                                330                                335  
 Lys Val Met Ile Arg Ser Ser Ser Asp Ser Ser Tyr Met Ser Gly Ser  
                                 340                                345                                350  
 Pro Gly Gly Ser Pro Gly Ser Gly Ser Ala Glu Lys Pro Ser Ser Asp  
                                 355                                360                                365  
 Val Asp Ile Ser Thr His Ser Pro Ser Leu Pro Leu Ala Arg Glu Pro  
                                 370                                375                                380  
 Val Val Leu Ser Ile Ala Ser Ser Arg Leu Pro Gln Glu Ser Pro Pro

385                      390                      395                      400  
Leu Pro Glu Ser Arg Asp Ser His Pro Pro Leu Arg Leu Lys Lys Ser  
                         405                      410                      415  
Phe Glu Ile Leu Val Arg Lys Pro Met Ser Ser Lys Pro Lys Pro Pro  
                         420                      425                      430  
Pro Arg Lys Tyr Phe Lys Ser Asp Ser Asp Pro Gln Lys Ser Leu Glu  
                         435                      440                      445  
Glu Arg Glu Asn Ser Ser Cys Ser Ser Gly His Thr Pro Pro Thr Cys  
                         450                      455                      460  
Gly Gln Glu Ala Arg Glu Leu Leu Pro Leu Leu Leu Pro Gln Glu Asp  
465                      470                      475                      480  
Thr Ala Gly Arg Ser Pro Ser Ala Ser Ala Gly Cys Pro Gly Pro Gly  
                         485                      490                      495  
Ile Gly Pro Gln Thr Lys Ser Ser Thr Glu Gly Glu Pro Gly Trp Arg  
                         500                      505                      510  
Arg Ala Ser Pro Val Thr Gln Thr Ser Pro Ile Lys His Pro Leu Leu  
                         515                      520                      525  
Lys Arg Gln Ala Arg Met Asp Tyr Ser Phe Asp Thr Thr Ala Glu Asp  
                         530                      535                      540  
Pro Trp Val Arg Ile Ser Asp Cys Ile Lys Asn Leu Phe Ser Pro Ile  
545                      550                      555                      560  
Met Ser Glu Asn His Gly His Met Pro Leu Gln Pro Asn Ala Ser Leu  
                         565                      570                      575  
Asn Glu Glu Glu Gly Thr Gln Gly His Pro Asp Gly Thr Pro Pro Lys  
                         580                      585                      590  
Leu Asp Thr Ala Asn Gly Thr Pro Lys Val Tyr Lys Ser Ala Asp Ser  
                         595                      600                      605  
Ser Thr Val Lys Lys Gly Pro Pro Val Ala Pro Lys Pro Ala Trp Phe  
                         610                      615                      620



Arg Gln Ser Leu Lys Gly Leu Arg Asn Arg Ala Ser Asp Pro Arg Gly  
625                      630                      635                      640  
Leu Pro Asp Pro Ala Leu Ser Thr Gln Pro Ala Pro Ala Ser Arg Glu  
                         645                      650                      655  
His Leu Gly Ser His Ile Arg Ala Ser Ser Ser Ser Ser Ser Ile Arg  
                         660                      665                      670  
Gln Arg Ile Ser Ser Phe Glu Thr Phe Gly Ser Ser Gln Leu Pro Asp  
                         675                      680                      685  
Lys Gly Ala Gln Arg Leu Ser Leu Gln Pro Ser Ser Gly Glu Ala Ala  
                         690                      695                      700  
Lys Pro Leu Gly Lys His Glu Glu Gly Arg Phe Ser Gly Leu Leu Gly  
705                      710                      715                      720  
Arg Gly Ala Ala Pro Thr Leu Val Pro Gln Gln Pro Glu Gln Val Leu  
                         725                      730                      735  
Ser Ser Gly Ser Pro Ala Ala Ser Glu Ala Arg Asp Pro Gly Val Ser  
                         740                      745                      750  
Glu Ser Pro Pro Pro Gly Arg Gln Pro Asn Gln Lys Thr Leu Pro Pro  
                         755                      760                      765  
Gly Pro Asp Pro Leu Leu Arg Leu Leu Ser Thr Gln Ala Glu Glu Ser  
                         770                      775                      780  
Gln Gly Pro Val Leu Lys Met Pro Ser Gln Arg Ala Arg Ser Phe Pro  
785                      790                      795                      800  
Leu Thr Arg Ser Gln Ser Cys Glu Thr Lys Leu Leu Asp Glu Lys Thr  
                         805                      810                      815  
Ser Lys Leu Tyr Ser Ile Ser Ser Gln Val Ser Ser Ala Val Met Lys  
                         820                      825                      830  
Ser Leu Leu Cys Leu Pro Ser Ser Ile Ser Cys Ala Gln Thr Pro Cys  
                         835                      840                      845  
Ile Pro Lys Glu Gly Ala Ser Pro Thr Ser Ser Ser Asn Glu Asp Ser

出証特 2 0 0 4 - 3 0 5 9 6 6 0

Asp Lys Pro Leu Thr Ile Asn Arg Ile Phe Lys Gly Ala Ala Ser Glu  
 1090 1095 1100  
 Gln Ser Glu Thr Val Gln Pro Gly Asp Glu Ile Leu Gln Leu Gly Gly  
 1105 1110 1115 1120  
 Thr Ala Met Gln Gly Leu Thr Arg Phe Glu Ala Trp Asn Ile Ile Lys  
 1125 1130 1135  
 Ala Leu Pro Asp Gly Pro Val Thr Ile Val Ile Arg Arg Lys Ser Leu  
 1140 1145 1150  
 Gln Ser Lys Glu Thr Thr Ala Ala Gly Asp Ser  
 1155 1160

<210> 2350

<211> 306

<212> PRT

<213> Homo sapiens

<400> 2350

Met Ser Asn Lys Arg Ser Asn Ser Phe Arg Gln Ala Ile Leu Gln Gly  
 1 5 10 15  
 Asn Arg Arg Leu Ser Ser Lys Ala Leu Leu Glu Glu Lys Gly Leu Ser  
 20 25 30  
 Leu Ser Gln Arg Leu Ile Arg His Val Ala Tyr Glu Thr Leu Pro Arg  
 35 40 45  
 Glu Ile Asp Arg Lys Trp Tyr Tyr Asp Ser Tyr Thr Cys Cys Pro Pro  
 50 55 60  
 Pro Trp Phe Met Ile Thr Val Thr Leu Leu Glu Val Ala Phe Phe Leu  
 65 70 75 80  
 Tyr Asn Gly Val Ser Leu Gly Gln Phe Val Leu Gln Val Thr His Pro

|   |     |     |     |
|---|-----|-----|-----|
|   | 85  | 90  | 95  |
| Arg Tyr Leu Lys Asn Ser Leu Val Tyr His Pro Gln Leu Arg Ala Gln |     |     |     |
| 100   | 105 | 110 |     |
| Val Trp Arg Tyr Leu Thr Tyr Ile Phe Met His Ala Gly Ile Glu His |     |     |     |
| 115   | 120 | 125 |     |
| Leu Gly Leu Asn Val Val Leu Gln Leu Leu Val Gly Val Pro Leu Glu |     |     |     |
| 130   | 135 | 140 |     |
| Met Val His Gly Ala Thr Arg Ile Gly Leu Val Tyr Val Ala Gly Val |     |     |     |
| 145   | 150 | 155 | 160 |
| Val Ala Gly Ser Leu Ala Val Ser Val Ala Asp Met Thr Ala Pro Val |     |     |     |
| 165   | 170 | 175 |     |
| Val Gly Ser Ser Gly Gly Val Tyr Ala Leu Val Ser Ala His Leu Ala |     |     |     |
| 180   | 185 | 190 |     |
| Asn Ile Val Met Asn Trp Ser Gly Met Lys Cys Gln Phe Lys Leu Leu |     |     |     |
| 195   | 200 | 205 |     |
| Arg Met Ala Val Ala Leu Ile Cys Met Ser Met Glu Phe Gly Arg Ala |     |     |     |
| 210   | 215 | 220 |     |
| Val Trp Leu Arg Phe His Pro Ser Ala Tyr Pro Pro Cys Pro His Pro |     |     |     |
| 225   | 230 | 235 | 240 |
| Ser Phe Val Ala His Leu Gly Gly Val Ala Val Gly Ile Thr Leu Gly |     |     |     |
| 245   | 250 | 255 |     |
| Val Val Val Leu Arg Asn Tyr Glu Gln Arg Leu Gln Asp Gln Ser Leu |     |     |     |
| 260   | 265 | 270 |     |
| Trp Trp Ile Phe Val Ala Met Tyr Thr Val Phe Val Leu Phe Ala Val |     |     |     |
| 275   | 280 | 285 |     |
| Phe Trp Asn Ile Phe Ala Tyr Thr Leu Leu Asp Leu Lys Leu Pro Pro |     |     |     |
| 290   | 295 | 300 |     |
| Pro Pro   |     |     |     |
| 305   |     |     |     |

&lt;210&gt; 2351

&lt;211&gt; 178

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2351

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Met Val Gly Phe Pro Asn Ala Gly Lys Ser Ser Leu Leu Arg Ala Ile
  1             5             10             15
Ser Asn Ala Arg Pro Ala Val Ala Ser Tyr Pro Phe Thr Thr Leu Lys
          20             25             30
Pro His Val Gly Ile Val His Tyr Glu Gly His Leu Gln Ile Ala Val
          35             40             45
Ala Asp Ile Pro Gly Ile Ile Arg Gly Ala His Gln Asn Arg Gly Leu
          50             55             60
Gly Ser Ala Phe Leu Arg His Ile Glu Arg Cys Arg Phe Leu Leu Phe
          65             70             75             80
Val Val Asp Leu Ser Gln Pro Glu Pro Trp Thr Gln Val Asp Asp Leu
          85             90             95
Lys Tyr Glu Leu Glu Met Tyr Glu Lys Gly Leu Ser Ala Arg Pro His
          100            105            110
Ala Ile Val Ala Asn Lys Ile Asp Leu Pro Glu Ala Gln Ala Asn Leu
          115            120            125
Ser Gln Leu Arg Asp His Leu Gly Gln Glu Val Ile Val Leu Ser Ala
          130            135            140
Leu Thr Gly Glu Asn Leu Glu Gln Leu Leu Leu His Leu Lys Val Leu
          145            150            155            160
Tyr Asp Ala Tyr Ala Glu Ala Glu Leu Gly Gln Gly Arg Gln Pro Leu

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165

170

175

Arg Trp

&lt;210&gt; 2352

&lt;211&gt; 143

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2352

Met Tyr Gly Ala Thr Gln Ser Gln Ser Asp Met Cys Asp Gln Asp Gln

1

5

10

15

Cys Ile Gln Ser Thr Lys Phe Val Leu Gln Ala Ala Ala Thr Pro Leu

20

25

30

Leu Gln Ser Glu Pro Ser Leu Thr Ser Asp Glu Leu His Leu Pro Gly

35

40

45

Lys Pro Gly Leu Gly Thr Pro Cys Ala Ser Leu Thr Leu Gly Pro Pro

50

55

60

Thr Pro Pro Ala Ser Met Pro Asn Leu Ala Glu Ala Thr Leu Ala Asp

65

70

75

80

Val Met Pro Arg Lys Asp Glu His Met Gly His Gln Phe Leu Thr Pro

85

90

95

Asp Glu Ala Pro Ser Pro Pro Arg Leu Leu Ala Ala Gly Ser Pro Leu

100

105

110

Ala His Ser Arg Thr Met His Val Leu Gly Leu Ala Ser Gln Asp Ser

115

120

125

Leu His Glu Asp Ser Val Arg Gly Leu Val Lys Leu Ser Ser Val

130

135

140

&lt;210&gt; 2353

&lt;211&gt; 171

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2353

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Met Ala Phe Gln Ser Leu Asp Ile Phe Ile Ile Asn Thr Asn Ile Pro
  1           5           10           15
Leu His Lys Gly Thr Ser Ser Asn Leu Arg Leu Glu Gly Pro Pro Ala
          20           25           30
Tyr Val Phe Leu Leu Ile Leu Ser Tyr Leu Pro Ser Ser Pro His Asn
          35           40           45
Ser His Ser Val Thr Lys Ser Arg Arg Phe Tyr Leu Leu Asn Leu Ser
          50           55           60
Tyr Pro Ser Leu Leu Ser His Ser Pro Asp Thr Thr Ile Asn Gln Ala
          65           70           75           80
Thr Ile Thr Ser Ser Cys Leu Thr Ala Asn Ala Ser Arg Leu Ala Ser
          85           90           95
Ala Phe Pro Trp Pro Cys Asp Asn Leu His Ser Ser Gln Gly Pro Lys
          100          105          110
Gln Ser Leu Gln Lys Val His Pro Asn Arg Ser Leu Asn Phe Gln Trp
          115          120          125
Leu Pro Leu Leu Cys Gly Leu Thr Met Ile Lys Ala Arg Pro Gly Val
          130          135          140
Gly Ala His Ala Cys Asn Pro Ser Thr Leu Gly Gly Arg Gly Gly Arg
          145          150          155          160
Ile Thr Thr Leu Gly Asp Pro Asp His Ser Pro

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165

170

&lt;210&gt; 2354

&lt;211&gt; 102

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2354

Met Val Glu Leu Val Ser Glu Ala Trp Tyr Ser Ala Ala Glu Ala Arg

1 5 10 15

Gln Gly Cys His Gly Asp Phe His Ser Ile Trp Met Ala Asn Cys Leu

20 25 30

His Val Gly Lys Pro His Gly Thr Asp Ser Phe Leu Lys Gly Ser Pro

35 40 45

Ser Ile Ser Glu Phe Gly Asp Phe Ile Ser Tyr Ser Trp Asn Gln Asn

50 55 60

Glu Cys Gly Val Ile Ile Tyr Ile Phe Phe Gly Thr Glu Ser Arg Ser

65 70 75 80

Val Ala Gln Ala Gly Val Gln Trp Cys Asp Leu Val Ser Leu Gln Pro

85 90 95

Leu Pro Pro Gly Phe Lys

100

&lt;210&gt; 2355

&lt;211&gt; 127

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens



&lt;400&gt; 2355

Met Pro Ser Cys Asp Pro Gly Pro Gly Pro Ala Cys Leu Pro Thr Lys  
 1 5 10 15  
 Thr Phe Arg Ser Tyr Leu Pro Arg Cys His Arg Thr Tyr Ser Cys Val  
 20 25 30  
 His Cys Arg Ala His Leu Ala Lys His Asp Glu Leu Ile Ser Lys Ser  
 35 40 45  
 Phe Gln Gly Ser His Gly Arg Ala Tyr Leu Phe Asn Ser Val Val Asn  
 50 55 60  
 Val Gly Cys Gly Pro Ala Glu Gln Arg Leu Leu Leu Thr Gly Leu His  
 65 70 75 80  
 Ser Val Ala Asp Ile Phe Cys Glu Ser Cys Lys Thr Thr Leu Gly Trp  
 85 90 95  
 Lys Tyr Glu Gln Ala Phe Glu Thr Ser Gln Lys Tyr Lys Glu Gly Lys  
 100 105 110  
 Tyr Ile Ile Glu Met Ser His Met Val Lys Asp Asn Gly Trp Asp  
 115 120 125

&lt;210&gt; 2356

&lt;211&gt; 143

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2356

Met Ala Asn Asp Leu Cys Met Trp Gly Ala Asp Ile Gln Ser Val Pro  
 1 5 10 15  
 Gly Pro Leu Trp His His Phe Cys Gly Arg Ala Gly Ser Pro Cys Thr

|   |     |     |
|---|-----|-----|
| 20  | 25  | 30  |
| Gly Leu Cys Cys Phe Cys Arg Pro Gly Phe Gln Gly Ser Cys Leu Cys |     |     |
| 35  | 40  | 45  |
| Leu Ala Leu Leu Phe Ser Ala Phe Pro Arg Tyr Phe Ser Asp Trp Ser |     |     |
| 50  | 55  | 60  |
| Leu Pro Ser Leu Pro Leu Pro Ser Gln Asp Cys Gly Pro Leu Gln Val |     |     |
| 65  | 70  | 75  |
| Leu Gln Met Asp Pro Ser Trp Leu Met Lys Val Phe Pro Ser His Leu |     |     |
| 85  | 90  | 95  |
| Glu Pro Thr Pro Ser Gly Ser Lys Ala Ala Gly Pro Gln Leu Pro Thr |     |     |
| 100   | 105 | 110 |
| Leu Val Gln Leu Cys Ser Cys Trp Val Glu Trp Gly Arg Gly Arg Trp |     |     |
| 115   | 120 | 125 |
| Ser Ser Cys Leu Tyr Ala Ala Gly Phe Gly Leu Leu Val Phe Tyr     |     |     |
| 130   | 135 | 140 |

&lt;210&gt; 2357

&lt;211&gt; 115

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2357

|   |    |    |
|---|----|----|
| Met Gly Phe Tyr His Val Gly Gln Ser Gly Leu Glu Leu Leu Ser Ser |    |    |
| 1   | 5  | 10 |
| Arg Asp Leu Pro Ala Ser Ala Ser Gln Ser Ala Gly Ile Pro Gly Val |    |    |
| 20  | 25 | 30 |
| Ser His Cys Ala Arg Pro Arg Leu Val Ile Phe Lys Met Gly Leu Lys |    |    |
| 35  | 40 | 45 |

Leu Arg Ala Gly Leu Gln Glu Glu Asn Glu Leu Arg Ser Asp Phe Arg  
 50 55 60  
 Cys Trp Asn Pro Ser Ala Ser Leu Pro Ala Thr Leu Gln Phe Leu Ala  
 65 70 75 80  
 Ala Ser Ser Ser Phe Ala Val Cys Pro Trp Phe Ala Val Phe Val Ile  
 85 90 95  
 Arg Asn Leu Cys Tyr Glu Ile Ser Gly Ile His Trp Leu Leu Leu Ser  
 100 105 110  
 Asn Phe Val  
 115

<210> 2358

<211> 179

<212> PRT

<213> Homo sapiens

<400> 2358

Met Arg Lys Glu Ala Val Pro Ser Arg Gly Leu Ser Cys Val Arg Gly  
 1 5 10 15  
 Gly Ala Ala Ala Val Ala Gly Val Ser Arg His Pro Thr Gln Gly Ser  
 20 25 30  
 Phe Gln Ile Arg His Leu Phe Thr Arg Pro Pro Tyr Ser Phe Phe Ser  
 35 40 45  
 Pro Arg Leu Leu His Val Gly Val Gln Cys Leu Ala Leu Thr Ser Pro  
 50 55 60  
 His Ser Ser Trp Trp Gly Phe Glu Leu Gly Val Pro Ser Ala Pro His  
 65 70 75 80  
 Ser Pro Leu Thr Ala Pro Thr Pro Arg Lys Pro Pro Leu Pro Pro Leu

|   |     |     |     |
|---|-----|-----|-----|
|   | 85  | 90  | 95  |
| Phe Val Ser Ser Phe His Ser Leu Gly Gly Gln Ala Ala Ala Pro Val |     |     |     |
| 100   | 105 | 110 |     |
| Ala Ala Pro Ala Leu Phe His Pro Pro Leu Leu Ser Gln Pro Glu Leu |     |     |     |
| 115   | 120 | 125 |     |
| Tyr Arg Glu Val Trp Ala Pro His Leu Gly Pro Cys His Ala Cys Ser |     |     |     |
| 130   | 135 | 140 |     |
| Gln Lys His Pro Arg Gly Ser Pro Asp Ser Leu Leu Pro Trp Ala Leu |     |     |     |
| 145   | 150 | 155 | 160 |
| Leu Arg Ser Pro Phe Ile Val Ala Phe Gly Val Cys Leu Met Pro Ile |     |     |     |
| 165   | 170 | 175 |     |
| Pro Cys Ser   |     |     |     |

&lt;210&gt; 2359

&lt;211&gt; 920

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2359

|   |    |    |    |
|---|----|----|----|
| Met Gly Arg Gly Ala Gly Arg Glu Tyr Ser Pro Ala Ala Thr Thr Ala |    |    |    |
| 1   | 5  | 10 | 15 |
| Glu Asn Gly Gly Gly Lys Lys Lys Gln Lys Glu Lys Glu Leu Asp Glu |    |    |    |
| 20  | 25 | 30 |    |
| Leu Lys Lys Glu Val Val Ile Val Thr Gly Cys Phe Ser Tyr Tyr Gln |    |    |    |
| 35  | 40 | 45 |    |
| Glu Ala Lys Ser Ser Lys Ile Met Asp Ser Phe Lys Asn Met Val Pro |    |    |    |
| 50  | 55 | 60 |    |

Gln Gln Ala Leu Val Ile Arg Glu Gly Glu Lys Met Gln Ile Asn Ala  
65 70 75 80  
Glu Glu Val Val Val Gly Asp Leu Val Glu Val Lys Gly Gly Asp Arg  
85 90 95  
Val Pro Ala Asp Leu Arg Ile Ile Ser Ser His Gly Cys Lys Val Asp  
100 105 110  
Asn Ser Ser Leu Thr Gly Glu Pro Glu Pro Gln Thr Arg Ser Pro Glu  
115 120 125  
Phe Thr His Glu Asn Pro Leu Glu Thr Arg Asn Ile Cys Phe Phe Ser  
130 135 140  
Thr Asn Cys Val Glu Gly Thr Ala Arg Gly Ile Val Ile Ala Thr Gly  
145 150 155 160  
Asp Arg Thr Val Met Gly Arg Ile Ala Thr Leu Ala Ser Gly Leu Glu  
165 170 175  
Val Gly Arg Thr Pro Ile Ala Met Glu Ile Glu His Phe Ile Gln Leu  
180 185 190  
Ile Thr Gly Val Ala Val Phe Leu Gly Val Ser Phe Phe Val Leu Ser  
195 200 205  
Leu Ile Leu Gly Tyr Ser Trp Leu Glu Ala Val Ile Phe Leu Ile Gly  
210 215 220  
Ile Ile Val Ala Asn Val Pro Glu Gly Leu Leu Ala Thr Val Thr Val  
225 230 235 240  
Cys Leu Thr Leu Thr Ala Lys Arg Met Ala Arg Lys Asn Cys Leu Val  
245 250 255  
Lys Asn Leu Glu Ala Val Glu Thr Leu Gly Ser Thr Ser Thr Ile Cys  
260 265 270  
Ser Asp Lys Thr Gly Thr Leu Thr Gln Asn Arg Met Thr Val Ala His  
275 280 285  
Met Trp Phe Asp Asn Gln Ile His Glu Ala Asp Thr Thr Glu Asp Gln

290                                      295                                      300  
Ser Gly Ala Thr Phe Asp Lys Arg Ser Pro Thr Trp Thr Ala Leu Ser  
305                                      310                                      315                                      320  
Arg Ile Ala Gly Leu Cys Asn Arg Ala Val Phe Lys Ala Gly Gln Glu  
   325                                      330                                      335  
Asn Ile Ser Val Ser Lys Arg Asp Thr Ala Gly Asp Ala Ser Glu Ser  
   340                                      345                                      350  
Ala Leu Leu Glu Cys Ile Glu Leu Ser Cys Gly Ser Val Arg Lys Met  
   355                                      360                                      365  
Arg Asp Arg Asn Pro Lys Val Ala Glu Ile Pro Phe Asn Ser Thr Asn  
   370                                      375                                      380  
Lys Tyr Gln Leu Ser Ile His Glu Arg Glu Asp Ser Pro Gln Ser His  
385                                      390                                      395                                      400  
Val Leu Val Met Lys Gly Ala Pro Glu Arg Ile Leu Asp Arg Cys Ser  
   405                                      410                                      415  
Thr Ile Leu Val Gln Gly Lys Glu Ile Pro Leu Asp Lys Glu Met Gln  
   420                                      425                                      430  
Asp Ala Phe Gln Asn Ala Tyr Met Glu Leu Gly Gly Leu Gly Glu Arg  
   435                                      440                                      445  
Val Leu Gly Phe Cys Gln Leu Asn Leu Pro Ser Gly Lys Phe Pro Arg  
   450                                      455                                      460  
Gly Phe Lys Phe Asp Thr Asp Glu Leu Asn Phe Pro Thr Glu Lys Leu  
465                                      470                                      475                                      480  
Cys Phe Val Gly Leu Met Ser Met Ile Asp Pro Pro Arg Ala Ala Val  
   485                                      490                                      495  
Pro Asp Ala Val Gly Lys Cys Arg Ser Ala Gly Ile Lys Val Ile Met  
   500                                      505                                      510  
Val Thr Gly Asp His Pro Ile Thr Ala Lys Ala Ile Ala Lys Gly Val  
   515                                      520                                      525

Gly Ile Ile Ser Glu Gly Asn Glu Thr Val Glu Asp Ile Ala Ala Arg  
530 535 540  
Leu Asn Ile Pro Met Ser Gln Val Asn Pro Arg Glu Ala Lys Ala Cys  
545 550 555 560  
Val Val His Gly Ser Asp Leu Lys Asp Met Thr Ser Glu Gln Leu Asp  
565 570 575  
Glu Ile Leu Lys Asn His Thr Glu Ile Val Phe Ala Arg Thr Ser Pro  
580 585 590  
Gln Gln Lys Leu Ile Ile Val Glu Gly Cys Gln Arg Gln Gly Ala Ile  
595 600 605  
Val Ala Val Thr Gly Asp Gly Val Asp Asp Ser Pro Ala Leu Lys Lys  
610 615 620  
Ala Asp Ile Gly Ile Ala Met Gly Ile Ser Gly Ser Asp Val Ser Lys  
625 630 635 640  
Gln Ala Ala Asp Met Ile Leu Leu Asp Asp Asn Phe Ala Ser Ile Val  
645 650 655  
Thr Gly Val Glu Glu Gly Arg Leu Ile Phe Asp Asn Leu Lys Lys Ser  
660 665 670  
Ile Ala Tyr Thr Leu Thr Ser Asn Ile Pro Glu Ile Thr Pro Phe Leu  
675 680 685  
Leu Phe Ile Ile Ala Asn Ile Pro Leu Pro Leu Gly Thr Val Thr Ile  
690 695 700  
Leu Cys Ile Asp Leu Gly Thr Asp Met Val Pro Ala Ile Ser Leu Ala  
705 710 715 720  
Tyr Glu Ala Ala Glu Ser Asp Ile Met Lys Arg Gln Pro Arg Asn Ser  
725 730 735  
Gln Thr Asp Lys Leu Val Asn Glu Arg Leu Ile Ser Met Ala Tyr Gly  
740 745 750  
Gln Ile Gly Met Ile Gln Ala Leu Gly Gly Phe Phe Thr Tyr Phe Val

755 760 765  
Ile Leu Ala Glu Asn Gly Phe Leu Pro Ser Arg Leu Leu Gly Ile Arg  
770 775 780  
Leu Asp Trp Asp Asp Arg Thr Met Asn Asp Leu Glu Asp Ser Tyr Gly  
785 790 795 800  
Gln Glu Trp Thr Tyr Glu Gln Arg Lys Val Val Glu Phe Thr Cys His  
805 810 815  
Thr Ala Phe Phe Ala Ser Ile Val Val Val Gln Trp Ala Asp Leu Ile  
820 825 830  
Ile Cys Lys Thr Arg Arg Asn Ser Val Phe Gln Gln Gly Met Lys Asn  
835 840 845  
Lys Ile Leu Ile Phe Gly Leu Leu Glu Glu Thr Ala Leu Ala Ala Phe  
850 855 860  
Leu Ser Tyr Cys Pro Gly Met Gly Val Ala Leu Arg Met Tyr Pro Leu  
865 870 875 880  
Lys Val Thr Trp Trp Phe Cys Ala Phe Pro Tyr Ser Leu Leu Ile Phe  
885 890 895  
Ile Tyr Asp Glu Val Arg Lys Leu Ile Leu Arg Arg Tyr Pro Gly Gly  
900 905 910  
Trp Val Glu Lys Glu Thr Tyr Tyr  
915 920

&lt;210&gt; 2360

&lt;211&gt; 293

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2360



Met Glu Leu Ser Asp Phe Glu Asp Cys Leu Thr Leu Phe Ala Gly Asp  
 1 5 10 15  
 Pro Gly Leu Gly Pro Glu Glu Leu Arg Ala Ala Met Gly Lys Ala Lys  
 20 25 30  
 Gln Leu Trp Gly Pro Pro Arg Gly Phe Arg Pro Glu Gln Ile Leu Gln  
 35 40 45  
 Leu Gly Arg Leu Leu Ile Gly Leu Gly Asp Arg Glu Leu Gln Glu Leu  
 50 55 60  
 Ile Leu Val Asp Trp Gly Val Leu Ser Thr Leu Gly Gln Ile Asp Gly  
 65 70 75 80  
 Trp Ser Thr Thr Gln Leu Arg Ile Val Val Ser Ser Phe Leu Arg Gln  
 85 90 95  
 Ser Gly Arg His Val Ser His Leu Asp Phe Val His Leu Thr Ala Leu  
 100 105 110  
 Gly Tyr Thr Leu Cys Gly Leu Arg Pro Glu Glu Leu Gln His Ile Ser  
 115 120 125  
 Ser Trp Glu Phe Ser Gln Ala Ala Leu Phe Leu Gly Thr Leu His Leu  
 130 135 140  
 Gln Cys Ser Glu Glu Gln Leu Glu Val Leu Ala His Leu Leu Val Leu  
 145 150 155 160  
 Pro Gly Gly Phe Gly Pro Ile Ser Asn Trp Gly Pro Glu Ile Phe Thr  
 165 170 175  
 Glu Ile Gly Thr Ile Ala Ala Gly Ile Pro Asp Leu Ala Leu Ser Ala  
 180 185 190  
 Leu Leu Arg Gly Gln Ile Gln Gly Val Thr Pro Leu Ala Ile Ser Val  
 195 200 205  
 Ile Pro Pro Pro Lys Phe Ala Val Val Phe Ser Pro Ile Gln Leu Ser  
 210 215 220  
 Ser Leu Thr Ser Ala Gln Ala Val Ala Val Thr Pro Glu Gln Met Ala

225                      230                      235                      240  
 Phe Leu Ser Pro Glu Gln Arg Arg Ala Val Ala Trp Ala Gln His Glu  
                          245                      250                      255  
 Gly Lys Glu Ser Pro Glu Gln Gln Gly Arg Ser Thr Ala Trp Gly Leu  
                          260                      265                      270  
 Gln Asp Trp Ser Arg Pro Ser Trp Ser Leu Val Leu Thr Ile Ser Phe  
                          275                      280                      285  
 Leu Gly His Leu Leu  
                          290

<210> 2361

<211> 173

<212> PRT

<213> Homo sapiens

<400> 2361

Met Trp Val Pro Ala Gly Gln Ala Ile Gly Gly Tyr Gly Pro Pro Pro  
     1                      5                      10                      15  
 Ala Gly Arg Gly Ala Pro Pro Pro Pro Pro Pro Phe Thr Ser Tyr Ile  
                          20                      25                      30  
 Val Ser Thr Pro Pro Gly Gly Phe Pro Pro Pro Gln Gly Phe Pro Gln  
                          35                      40                      45  
 Gly Tyr Gly Ala Pro Pro Gln Phe Ser Phe Gly Tyr Gly Pro Pro Pro  
                          50                      55                      60  
 Pro Pro Pro Asp Gln Phe Ala Pro Pro Gly Val Pro Pro Pro Pro Ala  
                          65                      70                      75                      80  
 Thr Pro Gly Ala Ala Pro Leu Ala Phe Pro Pro Pro Pro Ser Gln Ala  
                          85                      90                      95

Ala Pro Asp Met Ser Lys Pro Pro Thr Ala Gln Pro Asp Phe Pro Tyr  
                   100                          105                          110  
 Gly Gln Tyr Ala Gly Tyr Gly Gln Asp Leu Ser Gly Phe Gly Gln Gly  
                   115                          120                          125  
 Phe Ser Asp Pro Ser Gln Gln Pro Pro Ser Tyr Gly Gly Pro Ser Val  
                   130                          135                          140  
 Pro Gly Ser Gly Gly Pro Pro Ala Gly Gly Ser Gly Phe Gly Arg Gly  
                   145                          150                          155                          160  
 Gln Asn His Asn Val Gln Gly Phe His Pro Tyr Arg Arg  
                                   165                                  170

&lt;210&gt; 2362

&lt;211&gt; 270

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2362

Met His Gly Ser Cys Ser Phe Leu Met Leu Leu Leu Pro Leu Leu Leu  
           1                          5                          10                          15  
 Leu Leu Val Ala Thr Thr Gly Pro Val Gly Ala Leu Thr Asp Glu Glu  
                   20                          25                          30  
 Lys Arg Leu Met Val Glu Leu His Asn Leu Tyr Arg Ala Gln Val Ser  
                   35                          40                          45  
 Pro Pro Ala Ser Asp Met Leu His Met Arg Trp Asp Glu Glu Leu Ala  
                   50                          55                          60  
 Ala Phe Ala Lys Ala Tyr Ala Arg Gln Cys Val Trp Gly His Asn Lys  
                   65                          70                          75                          80  
 Glu Arg Gly Arg Arg Gly Glu Asn Leu Phe Ala Ile Thr Asp Glu Gly

|   |     |     |     |     |     |
|---|-----|-----|-----|-----|-----|
|   | 85  |     | 90  |     | 95  |
| Met Asp Val Pro Leu Ala Met Glu Glu Trp His His Glu Arg Glu His |     |     |     |     |     |
|   | 100 |     | 105 |     | 110 |
| Tyr Asn Leu Ser Ala Ala Thr Cys Ser Pro Gly Gln Met Cys Gly His |     |     |     |     |     |
|   | 115 |     | 120 |     | 125 |
| Tyr Thr Gln Val Val Trp Ala Lys Thr Glu Arg Ile Gly Cys Gly Ser |     |     |     |     |     |
|   | 130 |     | 135 |     | 140 |
| His Phe Cys Glu Lys Leu Gln Gly Val Glu Glu Thr Asn Ile Glu Leu |     |     |     |     |     |
| 145   |     | 150 |     | 155 | 160 |
| Leu Val Cys Asn Tyr Glu Pro Pro Gly Asn Val Lys Gly Lys Arg Pro |     |     |     |     |     |
|   | 165 |     | 170 |     | 175 |
| Tyr Gln Glu Gly Thr Pro Cys Ser Gln Cys Pro Ser Gly Tyr His Cys |     |     |     |     |     |
|   | 180 |     | 185 |     | 190 |
| Lys Asn Ser Leu Cys Glu Pro Ile Gly Ser Pro Glu Asp Ala Gln Asp |     |     |     |     |     |
|   | 195 |     | 200 |     | 205 |
| Leu Pro Tyr Leu Val Thr Glu Ala Pro Ser Phe Arg Ala Thr Glu Ala |     |     |     |     |     |
|   | 210 |     | 215 |     | 220 |
| Ser Asp Ser Arg Lys Met Gly Ala Glu Gly Pro Asp Lys Pro Ser Val |     |     |     |     |     |
| 225   |     | 230 |     | 235 | 240 |
| Val Ser Gly Leu Asn Ser Gly Pro Gly His Val Trp Gly Pro Leu Leu |     |     |     |     |     |
|   | 245 |     | 250 |     | 255 |
| Gly Leu Leu Leu Leu Pro Pro Leu Val Leu Ala Gly Ile Phe         |     |     |     |     |     |
|   | 260 |     | 265 |     | 270 |

&lt;210&gt; 2363

&lt;211&gt; 119

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2363

Met Arg Lys Lys Gly Ser Leu Pro Leu Gly Pro Ala Leu Leu Met His  
 1 5 10 15  
 Val Cys Ala His Ala Cys Lys Pro Gly Thr Phe Ser Ser Arg Pro Pro  
 20 25 30  
 Gly Leu Gly Gln Phe Leu Leu Leu Leu Pro Ser Pro Pro Thr Gly Cys  
 35 40 45  
 Val Leu Ser Asn Trp Asn Met Arg Leu Tyr Leu Gln Asp Trp Pro His  
 50 55 60  
 Gly Gly Arg Val Arg Ser Leu Phe Pro Val Ser Arg His Arg Ser Leu  
 65 70 75 80  
 Ser Leu Ala Leu Pro Cys Phe Gly Ala Ser Leu Val Ala Pro Val Arg  
 85 90 95  
 Phe Ser Arg Leu Val Ala Ala Gln Ser Gly Val Arg Thr Cys Arg Gly  
 100 105 110  
 His Ala Phe Leu Ala Leu Thr  
 115

&lt;210&gt; 2364

&lt;211&gt; 242

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2364

Met Pro Pro Gly His Thr His Ser Gly Ser Asp Ser Ser Asp Ser Glu  
 1 5 10 15  
 Tyr Ser Ser Gln Thr Thr Val Ser Gly Leu Ser Glu Glu Leu Arg His

|   |   |     |     |
|---|---|-----|-----|
| 20  | 25                                      | 30  |     |
| Tyr Glu Ala Gln Gln Gly   | Ala Gly Gly Pro Ala His Gln Val Ile Val |     |     |
| 35  | 40                                      | 45  |     |
| Glu Ala Thr Glu Asn Pro Val Phe Ala His Ser Thr Val Val His Pro |   |     |     |
| 50  | 55                                      | 60  |     |
| Glu Ser Arg His His Pro Pro Ser Asn Pro Arg Gln Gln Pro His Leu |   |     |     |
| 65  | 70                                      | 75  | 80  |
| Asp Ser Gly Ser Leu Pro Pro Gly Arg Gln Gly Gln Gln Pro Arg Arg |   |     |     |
| 85  | 90                                      | 95  |     |
| Asp Pro Pro Arg Glu Gly Leu Trp Pro Pro Pro Tyr Arg Pro Arg Arg |   |     |     |
| 100   | 105                                     | 110 |     |
| Asp Ala Phe Glu Ile Ser Thr Glu Gly His Ser Gly Pro Ser Asn Arg |   |     |     |
| 115   | 120                                     | 125 |     |
| Ala Arg Trp Gly Pro Arg Gly Ala Arg Ser His Asn Pro Arg Asn Pro |   |     |     |
| 130   | 135                                     | 140 |     |
| Ala Ser Thr Ala Met Gly Ser Ser Val Pro Gly Tyr Cys Gln Pro Ile |   |     |     |
| 145   | 150                                     | 155 | 160 |
| Thr Thr Val Thr Ala Ser Ala Ser Val Thr Val Ala Val His Pro Pro |   |     |     |
| 165   | 170                                     | 175 |     |
| Pro Val Pro Gly Pro Gly Arg Asn Pro Arg Gly Gly Leu Cys Pro Gly |   |     |     |
| 180   | 185                                     | 190 |     |
| Tyr Pro Glu Thr Asp His Gly Leu Phe Glu Asp Pro Thr Cys Leu Ser |   |     |     |
| 195   | 200                                     | 205 |     |
| Thr Ser Gly Val Arg Gly Gly Ile Arg Arg Trp Lys Ser Leu Ser Cys |   |     |     |
| 210   | 215                                     | 220 |     |
| Arg Thr Trp Asn Ala Arg Arg Gly Pro Gly Glu Ala Ala Pro Thr Glu |   |     |     |
| 225   | 230                                     | 235 | 240 |
| Gly Asp   |   |     |     |

&lt;210&gt; 2365

&lt;211&gt; 945

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2365

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Met Ala Glu Gly Gln Gly Gly Gly Gly Gln Arg Trp Asp Trp Ala Gly
  1             5             10             15
Gly Gly Arg Ala Ala Glu Glu Glu Val Val Arg Arg Arg Cys Arg Arg
          20             25             30
Gly Glu Glu Ala Gln Val Ala Gln Pro Trp Pro Glu Gly Ser Arg Gly
          35             40             45
Thr Ala Ala Gly Pro Pro Val Glu Glu Arg Phe Arg Gln Leu His Leu
          50             55             60
Arg Lys Gln Val Ser Tyr Arg Lys Ala Ile Thr Lys Ser Gly Leu Gln
          65             70             75             80
His Leu Ala Pro Pro Pro Pro Thr Pro Gly Ala Pro Cys Ser Glu Ser
          85             90             95
Glu Arg Gln Ile Arg Ser Thr Val Asp Trp Ser Glu Ser Ala Thr Tyr
          100            105            110
Gly Glu His Ile Trp Phe Glu Thr Asn Val Ser Gly Asp Phe Cys Tyr
          115            120            125
Val Gly Glu Gln Tyr Cys Val Ala Arg Met Leu Lys Ser Val Ser Arg
          130            135            140
Arg Lys Cys Ala Ala Cys Lys Ile Val Val His Thr Pro Cys Ile Glu
          145            150            155            160
Gln Leu Glu Lys Ile Asn Phe Arg Cys Lys Pro Ser Phe Arg Glu Ser

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|   |     |     |     |     |     |
|---|-----|-----|-----|-----|-----|
|   | 165 |     | 170 |     | 175 |
| Gly Ser Arg Asn Val Arg Glu Pro Thr Phe Val Arg His His Trp Val |     |     |     |     |     |
|   | 180 |     | 185 |     | 190 |
| His Arg Arg Arg Gln Asp Gly Lys Cys Arg His Cys Gly Lys Gly Phe |     |     |     |     |     |
|   | 195 |     | 200 |     | 205 |
| Gln Gln Lys Phe Thr Phe His Ser Lys Glu Ile Val Ala Ile Ser Cys |     |     |     |     |     |
|   | 210 |     | 215 |     | 220 |
| Ser Trp Cys Lys Gln Ala Tyr His Ser Lys Val Ser Cys Phe Met Leu |     |     |     |     |     |
| 225   |     | 230 |     | 235 | 240 |
| Gln Gln Ile Glu Glu Pro Cys Ser Leu Gly Val His Ala Ala Val Val |     |     |     |     |     |
|   | 245 |     | 250 |     | 255 |
| Ile Pro Pro Thr Trp Ile Leu Arg Ala Arg Arg Pro Gln Asn Thr Leu |     |     |     |     |     |
|   | 260 |     | 265 |     | 270 |
| Lys Ala Ser Lys Lys Lys Lys Arg Ala Ser Phe Lys Arg Lys Ser Ser |     |     |     |     |     |
|   | 275 |     | 280 |     | 285 |
| Lys Lys Gly Pro Glu Glu Gly Arg Trp Arg Pro Phe Ile Ile Arg Pro |     |     |     |     |     |
|   | 290 |     | 295 |     | 300 |
| Thr Pro Ser Pro Leu Met Lys Pro Leu Leu Val Phe Val Asn Pro Lys |     |     |     |     |     |
| 305   |     | 310 |     | 315 | 320 |
| Ser Gly Gly Asn Gln Gly Ala Lys Ile Ile Gln Ser Phe Leu Trp Tyr |     |     |     |     |     |
|   | 325 |     | 330 |     | 335 |
| Leu Asn Pro Arg Gln Val Phe Asp Leu Ser Gln Gly Gly Pro Lys Glu |     |     |     |     |     |
|   | 340 |     | 345 |     | 350 |
| Ala Leu Glu Met Tyr Arg Lys Val His Asn Leu Arg Ile Leu Ala Cys |     |     |     |     |     |
|   | 355 |     | 360 |     | 365 |
| Gly Gly Asp Gly Thr Val Gly Trp Ile Leu Ser Thr Leu Asp Gln Leu |     |     |     |     |     |
|   | 370 |     | 375 |     | 380 |
| Arg Leu Lys Pro Pro Pro Pro Val Ala Ile Leu Pro Leu Gly Thr Gly |     |     |     |     |     |
| 385   |     | 390 |     | 395 | 400 |



|   |     |     |     |
|---|-----|-----|-----|
| Asn Asp Leu Ala Arg Thr Leu Asn Trp Gly Gly Gly Tyr Thr Asp Glu |     |     |     |
| 405   | 410 | 415 |     |
| Pro Val Ser Lys Ile Leu Ser His Val Glu Glu Gly Asn Val Val Gln |     |     |     |
| 420   | 425 | 430 |     |
| Leu Asp Arg Trp Asp Leu His Ala Glu Pro Asn Pro Glu Ala Gly Pro |     |     |     |
| 435   | 440 | 445 |     |
| Glu Asp Arg Asp Glu Gly Ala Thr Asp Arg Leu Pro Leu Asp Val Phe |     |     |     |
| 450   | 455 | 460 |     |
| Asn Asn Tyr Phe Ser Leu Gly Phe Asp Ala His Val Thr Leu Glu Phe |     |     |     |
| 465   | 470 | 475 | 480 |
| His Glu Ser Arg Glu Ala Asn Pro Glu Lys Phe Asn Ser Arg Phe Arg |     |     |     |
| 485   | 490 | 495 |     |
| Asn Lys Met Phe Tyr Ala Gly Thr Ala Phe Ser Asp Phe Leu Met Gly |     |     |     |
| 500   | 505 | 510 |     |
| Ser Ser Lys Asp Leu Ala Lys His Ile Arg Val Val Cys Asp Gly Met |     |     |     |
| 515   | 520 | 525 |     |
| Asp Leu Thr Pro Lys Ile Gln Asp Leu Lys Pro Gln Cys Val Val Phe |     |     |     |
| 530   | 535 | 540 |     |
| Leu Asn Ile Pro Arg Tyr Cys Ala Gly Thr Met Pro Trp Gly His Pro |     |     |     |
| 545   | 550 | 555 | 560 |
| Gly Glu His His Asp Phe Glu Pro Gln Arg His Asp Asp Gly Tyr Leu |     |     |     |
| 565   | 570 | 575 |     |
| Glu Val Ile Gly Phe Thr Met Thr Ser Leu Ala Ala Leu Gln Val Gly |     |     |     |
| 580   | 585 | 590 |     |
| Gly His Gly Glu Arg Leu Thr Gln Cys Arg Glu Val Val Leu Thr Thr |     |     |     |
| 595   | 600 | 605 |     |
| Ser Lys Ala Ile Pro Val Gln Val Asp Gly Glu Pro Cys Lys Leu Ala |     |     |     |
| 610   | 615 | 620 |     |
| Ala Ser Arg Ile Arg Ile Ala Leu Arg Asn Gln Ala Thr Met Val Gln |     |     |     |

625                      630                      635                      640  
Lys Ala Lys Arg Arg Ser Ala Ala Pro Leu His Ser Asp Gln Gln Pro  
                         645                      650                      655  
Val Pro Glu Gln Leu Arg Ile Gln Val Ser Arg Val Ser Met His Asp  
                         660                      665                      670  
Tyr Glu Ala Leu His Tyr Asp Lys Glu Gln Leu Lys Glu Ala Ser Val  
                         675                      680                      685  
Pro Leu Gly Thr Val Val Val Pro Gly Asp Ser Asp Leu Glu Leu Cys  
                         690                      695                      700  
Arg Ala His Ile Glu Arg Leu Gln Gln Glu Pro Asp Gly Ala Gly Ala  
705                      710                      715                      720  
Lys Ser Pro Thr Cys Gln Lys Leu Ser Pro Lys Trp Cys Phe Leu Asp  
                         725                      730                      735  
Ala Thr Thr Ala Ser Arg Phe Tyr Arg Ile Asp Arg Ala Gln Glu His  
                         740                      745                      750  
Leu Asn Tyr Val Thr Glu Ile Ala Gln Asp Glu Ile Tyr Ile Leu Asp  
                         755                      760                      765  
Pro Glu Leu Leu Gly Ala Ser Ala Arg Pro Asp Leu Pro Thr Pro Thr  
                         770                      775                      780  
Ser Pro Leu Pro Thr Ser Pro Cys Ser Pro Thr Pro Arg Ser Leu Gln  
785                      790                      795                      800  
Gly Asp Ala Ala Pro Pro Gln Gly Glu Glu Leu Ile Glu Ala Ala Lys  
                         805                      810                      815  
Arg Asn Asp Phe Cys Lys Leu Gln Glu Leu His Arg Ala Gly Gly Asp  
                         820                      825                      830  
Leu Met His Arg Asp Glu Gln Ser Arg Thr Leu Leu His His Ala Val  
                         835                      840                      845  
Ser Thr Gly Ser Lys Asp Val Val Arg Tyr Leu Leu Asp His Ala Pro  
                         850                      855                      860

Pro Glu Ile Leu Asp Ala Val Glu Glu Asn Gly Glu Thr Cys Leu His  
 865                      870                      875                      880  
 Gln Ala Ala Ala Leu Gly Gln Arg Thr Ile Cys His Tyr Ile Val Glu  
                     885                      890                      895  
 Ala Gly Ala Ser Leu Met Lys Thr Asp Gln Gln Gly Asp Thr Pro Arg  
                     900                      905                      910  
 Gln Arg Ala Glu Lys Ala Gln Asp Thr Glu Leu Ala Ala Tyr Leu Glu  
                     915                      920                      925  
 Asn Arg Gln His Tyr Gln Met Ile Gln Arg Glu Asp Gln Glu Thr Ala  
                     930                      935                      940  
 Val  
 945

<210> 2366

<211> 115

<212> PRT

<213> Homo sapiens

<400> 2366

Met Gly Tyr Asn Pro Val Leu Leu Ser Phe Val Arg Met Phe Pro Ala  
                     1                      5                      10                      15  
 Gln Ala Leu Arg Ser Ser Leu Ser Ser Tyr Val Leu Phe Ala Tyr Pro  
                     20                      25                      30  
 Val Ile Val Gly Phe Cys Trp Val Leu Cys Val Leu Asn Thr Phe Leu  
                     35                      40                      45  
 Leu Ser Gly Thr Thr Arg Tyr Ser Arg Leu Ile Leu Cys Val Ser Tyr  
                     50                      55                      60  
 Arg Ser Pro Lys Ile Ser His Phe Ser Lys Lys Pro Ser Phe Leu Leu

|   |     |     |    |
|---|-----|-----|----|
| 65  | 70  | 75  | 80 |
| Leu Glu Arg Glu Ile Arg Asn His Gly Cys Trp Val Cys Ser Leu Leu |     |     |    |
|   | 85  | 90  | 95 |
| Leu Gly Cys Leu Ser Phe Gly Pro Ser His Leu Thr Lys Gly Tyr Met |     |     |    |
| 100   | 105 | 110 |    |
| Cys Phe Tyr   |     |     |    |
| 115   |     |     |    |

&lt;210&gt; 2367

&lt;211&gt; 217

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2367

|   |     |     |    |
|---|-----|-----|----|
| Met Ala Ser Ala Gly Pro Asn Arg Pro Glu Ile Ser Leu Ala Arg Asn |     |     |    |
| 1   | 5   | 10  | 15 |
| Ser Thr Cys Val Gly Cys Pro Asn Asn His Ser Phe Ser Arg Thr Val |     |     |    |
| 20  | 25  | 30  |    |
| Ala His Gly Gly Arg Ala Leu Ala Ser Ala Trp Pro Pro Gln Ala Gln |     |     |    |
| 35  | 40  | 45  |    |
| Phe Leu Pro Val Gly Gly Arg Ser Arg Pro Gly Ser Cys Pro Ser Ala |     |     |    |
| 50  | 55  | 60  |    |
| Ser Ser Pro Gly Pro Glu Leu Val Pro Val Gly Leu Ser Arg Pro Ser |     |     |    |
| 65  | 70  | 75  | 80 |
| Ser Pro Gly His Leu His Gly Pro Ser Ser Cys Leu Thr Thr Thr Thr |     |     |    |
| 85  | 90  | 95  |    |
| Phe Gly Pro Ala Pro Ala Gln Leu Leu Ala Ala Val Val Gly Pro Arg |     |     |    |
| 100   | 105 | 110 |    |

Leu Pro Cys Val Gln Ala Ser Arg Thr His Leu Arg Leu Ser Gly Gly  
 115 120 125  
 Pro Glu Arg Pro Gly Ser Cys Leu Pro Ala Ala Ser Pro Gly Pro Ala  
 130 135 140  
 Ala Ala Ser Arg Arg Pro Pro Gln Ala Thr Phe Pro Pro Ala Ser Arg  
 145 150 155 160  
 Gln Pro Arg Gln Ala Arg Leu Pro Pro Ala Gly Gly Leu Leu Arg Arg  
 165 170 175  
 Leu Ile Ser Cys Pro Ala Ala Ala Ser Pro Gly Gln Ala Pro Ala Cys  
 180 185 190  
 Arg Gln Ala Pro Gln Ala Gln Leu Leu Arg Pro Glu Gly Phe Ser Arg  
 195 200 205  
 Pro Gly Ser Cys Leu Ala Ala Ala Ser  
 210 215

<210> 2368

<211> 196

<212> PRT

<213> Homo sapiens

<400> 2368

Met Gln Gly Cys Ala Arg Ile Asn Ser His Pro Ser Gly Ala Phe Gly  
 1 5 10 15  
 Asp Gly His Val Gln Tyr Cys Asp Asn Val Val Asp Arg Trp Pro Phe  
 20 25 30  
 Leu Pro Leu Phe Cys Thr Phe Phe Pro Asp Gly Trp Gly Cys Phe Trp  
 35 40 45  
 Ala Ala Gln Ser Val Val Gly Ser Trp Gly Arg Gly Asn Gly Pro Gln

50                                      55                                      60  
 Leu Leu Pro Gln Glu Leu Trp Lys Trp His Trp His Gly Tyr Ala Pro  
 65                                      70                                      75                                      80  
 Arg Leu Ser Leu Leu Leu Phe Pro Gly Pro Pro Val Val Ile Thr His  
                                     85                                      90                                      95  
 Pro Asp Leu Gly Asp Leu His Asn Ile Thr Glu Val Gln Pro Leu Gln  
                                     100                                      105                                      110  
 Gly Gly Arg Trp Trp His Ser Arg Thr Cys Ser Ser Pro Leu Cys Gly  
                                     115                                      120                                      125  
 His His Ser Leu Pro Leu Leu Leu Val Ser Leu Ser Leu Ala Glu Arg  
                                     130                                      135                                      140  
 Gly Pro Ala Gly Pro Ser Glu Cys Phe Trp Arg Asn Ala Leu Ile Gln  
 145                                      150                                      155                                      160  
 Lys Glu Glu Val Lys Ser Leu Lys Thr Val Gly Asp Lys Thr Gly Asn  
                                     165                                      170                                      175  
 Cys Phe Cys Phe Met Tyr Asn Lys Tyr Leu Pro Phe Tyr Val Ser His  
                                     180                                      185                                      190  
 Phe Leu Gly Ile  
                                     195

&lt;210&gt; 2369

&lt;211&gt; 109

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2369

Met Thr Gly Tyr His Lys Thr Arg Val Arg Gly Glu Lys Arg Gln Gly  
 1                                      5                                      10                                      15

Asp Gly Lys Lys Ser Trp Arg Ile Tyr Val Gln Ser Cys Gln Leu Gln  
                     20                    25                    30  
 Met Thr Lys Val Lys Pro Gln Ile Ser Arg Met Leu Arg Arg Met Gly  
                     35                    40                    45  
 Asn Ile Phe Leu Glu Asp Trp Ala Ala Pro Thr Pro Thr Leu Thr Leu  
                     50                    55                    60  
 Pro Ser Pro Thr Leu Ile Pro Thr Ser Glu Val Gln Ile Lys Gly Arg  
                     65                    70                    75                    80  
 Gly Gln Arg Glu Phe Gln Ser Arg Phe Leu Asp Ser Ser Phe Phe Pro  
                                     85                    90                    95  
 Leu Cys Leu Pro Met Val Ser Pro Ser Leu Gly Ile Leu  
                     100                    105

<210> 2370

<211> 283

<212> PRT

<213> Homo sapiens

<400> 2370

Met Asn Thr Leu Ser Phe Ala Val Leu Lys Glu Gly Arg Gln Leu Thr  
           1                    5                    10                    15  
 Tyr Glu Lys Val Asn Leu Ser Ser Ile Arg Ala Met Leu Asn Ser Asn  
                     20                    25                    30  
 Asp Val Ser Glu Tyr Leu Lys Ile Ser Pro His Gly Leu Glu Ala Arg  
                     35                    40                    45  
 Cys Asp Ala Ser Ser Phe Glu Ser Val Arg Cys Thr Phe Cys Val Asp  
                     50                    55                    60  
 Ala Gly Val Trp Tyr Tyr Glu Val Thr Val Val Thr Ser Gly Val Met

65                      70                      75                      80  
Gln Ile Gly Trp Ala Thr Arg Asp Ser Lys Phe Leu Asn His Glu Gly  
                         85                      90                      95  
Tyr Gly Ile Gly Asp Asp Glu Tyr Ser Cys Ala Tyr Asp Gly Cys Arg  
                         100                      105                      110  
Gln Leu Ile Trp Tyr Asn Ala Arg Ser Lys Pro His Ile His Pro Cys  
                         115                      120                      125  
Trp Lys Glu Gly Asp Thr Val Gly Phe Leu Leu Asp Leu Asn Glu Lys  
                         130                      135                      140  
Gln Met Ile Phe Phe Leu Asn Gly Asn Gln Leu Pro Pro Glu Lys Gln  
145                      150                      155                      160  
Val Phe Ser Ser Thr Val Ser Gly Phe Phe Ala Ala Ala Ser Phe Met  
                         165                      170                      175  
Ser Tyr Gln Gln Cys Glu Phe Asn Phe Gly Ala Lys Pro Phe Lys Tyr  
                         180                      185                      190  
Pro Pro Ser Met Lys Phe Ser Thr Phe Asn Asp Tyr Ala Phe Leu Thr  
                         195                      200                      205  
Ala Glu Glu Lys Ile Ile Leu Pro Arg His Arg Arg Leu Ala Leu Leu  
                         210                      215                      220  
Lys Gln Val Ser Ile Arg Glu Asn Cys Cys Ser Leu Cys Cys Asp Glu  
225                      230                      235                      240  
Val Ala Asp Thr Gln Leu Lys Pro Cys Gly His Ser Asp Leu Cys Met  
                         245                      250                      255  
Asp Cys Ala Leu Gln Leu Glu Thr Cys Pro Leu Cys Arg Lys Glu Ile  
                         260                      265                      270  
Val Ser Arg Ile Arg Gln Ile Ser His Ile Ser  
                         275                      280



&lt;210&gt; 2371

&lt;211&gt; 109

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2371

Met Leu Leu Met Ser Tyr Gly Ser Leu Leu Val Gln Leu Ala His Pro  
1 5 10 15  
Pro Ile His Ser Leu Phe Asp Ser Gln Gln Leu Ser Val Phe Ser Cys  
20 25 30  
Cys Ser Ser Trp Phe Ser Ser Leu Phe Leu Val Leu Phe Phe Ser Ser  
35 40 45  
Phe Phe Ser Asn Phe Phe Ser Val Leu Asp Cys Leu Ser Leu Met Phe  
50 55 60  
Cys Ser Phe Phe Leu Phe Phe Leu Glu Thr Gly Ser His Ser Val Thr  
65 70 75 80  
Gln Asp Gly Val Gln Trp His Asp Val Gly Ser Leu Gln Ser Leu Pro  
85 90 95  
Pro Lys Ala Gln Ala Ile Leu Pro Ser Gln Pro Pro Lys  
100 105

&lt;210&gt; 2372

&lt;211&gt; 372

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2372

Met Asp Gln Tyr Lys Phe Tyr Asp Pro Ser Pro Pro Arg Arg Arg Gly

|   |     |     |     |
|---|-----|-----|-----|
| 1   | 5   | 10  | 15  |
| Asn Trp Ile Thr Leu Lys Met Arg Lys Leu Ile Lys Ser Lys Lys Asp |     |     |     |
| 20  | 25  | 30  |     |
| Ile Asn Arg Glu Arg Gln Lys Ser Leu Thr Leu Thr Pro Thr Arg Ser |     |     |     |
| 35  | 40  | 45  |     |
| Asp Ser Ser Glu Gly Phe Leu Gln Leu Pro His Gln Asp Ser Gln Asp |     |     |     |
| 50  | 55  | 60  |     |
| Ser Ser Ser Val Gly Ser Asn Ser Leu Glu Asp Gly Gln Thr Leu Gly |     |     |     |
| 65  | 70  | 75  | 80  |
| Thr Lys Lys Ser Ser Asn Thr Thr Ser Phe Glu Asp Ile Ser Pro Gln |     |     |     |
| 85  | 90  | 95  |     |
| Gly Val Ser Asp Asp Ser Ser Thr Gly Ser Arg Val His Ala Gly Ala |     |     |     |
| 100   | 105 | 110 |     |
| Val Asn Asn Gln Ser Arg Pro Gln Ser His Ser Ser Gly Glu Phe Ser |     |     |     |
| 115   | 120 | 125 |     |
| Leu Leu His Asp His Glu Ala Trp Ser Ser Ser Gly Ser Ser Pro Ile |     |     |     |
| 130   | 135 | 140 |     |
| Gln Tyr Leu Lys Arg Gln Thr Arg Ser Ser Pro Val Leu Gln His Lys |     |     |     |
| 145   | 150 | 155 | 160 |
| Ile Ser Glu Thr Leu Glu Ser Arg His His Lys Ile Lys Thr Gly Ser |     |     |     |
| 165   | 170 | 175 |     |
| Pro Gly Ser Glu Val Val Thr Leu Gln Gln Phe Leu Glu Glu Ser Asn |     |     |     |
| 180   | 185 | 190 |     |
| Lys Leu Thr Ser Val Gln Ile Lys Ser Ser Ser Gln Glu Asn Leu Leu |     |     |     |
| 195   | 200 | 205 |     |
| Asp Glu Val Met Lys Ser Leu Ser Val Ser Ser Asp Phe Leu Gly Lys |     |     |     |
| 210   | 215 | 220 |     |
| Asp Lys Pro Val Ser Cys Gly Leu Ala Arg Ser Val Ser Gly Lys Thr |     |     |     |
| 225   | 230 | 235 | 240 |

<210> 2373

<211> 304

&lt;212&gt; PRT

<213> Homo sapiens

<400> 2373

出証特 2 0 0 4 - 3 0 5 9 6 6 0

|   |     |     |
|---|-----|-----|
| 20  | 25  | 30  |
| Ser Val Gly Ala Leu Ala Thr Ser Val Trp Leu Cys Leu Leu Cys Tyr |     |     |
| 35  | 40  | 45  |
| Phe Ala Phe Pro Phe Gln Leu Leu Ile Ala Ser Thr Phe Ile Gly Ala |     |     |
| 50  | 55  | 60  |
| Phe Cys Gly Asn Tyr Thr Thr Phe Trp Gly Ala Cys Phe Ala Tyr Ile |     |     |
| 65  | 70  | 75  |
| Val Asp Gln Cys Lys Glu His Lys Gln Lys Thr Ile Arg Ile Ala Ile |     |     |
| 85  | 90  | 95  |
| Ile Asp Phe Leu Leu Gly Leu Val Thr Gly Leu Thr Gly Leu Ser Ser |     |     |
| 100   | 105 | 110 |
| Gly Tyr Phe Ile Arg Glu Leu Gly Phe Glu Trp Ser Phe Leu Ile Ile |     |     |
| 115   | 120 | 125 |
| Ala Val Ser Leu Ala Val Asn Leu Ile Tyr Ile Leu Phe Phe Leu Gly |     |     |
| 130   | 135 | 140 |
| Asp Pro Val Lys Glu Cys Ser Ser Gln Asn Val Thr Met Ser Cys Ser |     |     |
| 145   | 150 | 155 |
| Glu Gly Phe Lys Asn Leu Phe Tyr Arg Thr Tyr Met Leu Phe Lys Asn |     |     |
| 165   | 170 | 175 |
| Ala Ser Gly Lys Arg Arg Phe Leu Leu Cys Leu Leu Leu Phe Thr Val |     |     |
| 180   | 185 | 190 |
| Ile Thr Tyr Phe Phe Val Val Ile Gly Ile Ala Pro Ile Phe Ile Leu |     |     |
| 195   | 200 | 205 |
| Tyr Glu Leu Asp Ser Pro Leu Cys Trp Asn Glu Val Phe Ile Gly Tyr |     |     |
| 210   | 215 | 220 |
| Gly Ser Ala Leu Gly Ser Ala Ser Phe Leu Thr Ser Phe Leu Gly Ile |     |     |
| 225   | 230 | 235 |
| Trp Leu Phe Ser Tyr Cys Met Glu Asp Ile His Met Ala Phe Ile Gly |     |     |
| 245   | 250 | 255 |

Ile Phe Thr Thr Met Thr Gly Met Ala Met Thr Ala Phe Ala Ser Thr  
                   260                  265                  270  
 Thr Leu Met Met Phe Phe Ser Gln Gly Ala Val Pro Phe His Tyr Cys  
                   275                  280                  285  
 Ala Ile Leu Cys Ser Thr Val His Val Val Lys Ser Gly Ser Phe Asp  
                   290                  295                  300

<210> 2374

<211> 114

<212> PRT

<213> Homo sapiens

<400> 2374

Met Gly Ile Leu Tyr Asp Ala Glu Val Tyr Gly Thr Ile Ile Pro Thr  
       1                  5                  10                  15  
 Ser Gln Val Val Ser Met Val Pro Ser Ser Phe Ser Thr Leu Ser Pro  
                   20                  25                  30  
 Ser Pro Val Ser Ile Ala Ala Ile Phe Met Ser Met Ser Ile Gln Cys  
                   35                  40                  45  
 Leu Leu Leu Phe Thr Ser Glu Asn Met Gln Tyr Leu Val Phe Phe Cys  
                   50                  55                  60  
 Tyr Ile Asn Ser Leu Arg Ile Met Ala Ser Ser Ser Ile His Val Ala  
       65                  70                  75                  80  
 Ala Lys Asp Met Ile Leu Phe Phe Phe Ile Ala Val Trp Tyr Ser Met  
                   85                  90                  95  
 Met Tyr Val Tyr His Ser Phe Ile Ile Arg Ser Thr Val Asp Arg His  
                   100                  105                  110  
 Leu Gly

&lt;210&gt; 2375

&lt;211&gt; 139

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2375

Met Phe Trp Pro Gln Ser Asp Ala Cys Pro Thr Pro Gly Thr Pro Ser  
1 5 10 15  
Ser Met Leu Gln Glu Gly Gly Gln Val Asp Pro Gly Val Cys Arg Ser  
20 25 30  
Leu His His Asn Pro Phe Pro Ser Leu Ser Val Ile Leu Gln Asp Phe  
35 40 45  
Thr Gly Ser Thr Val Ala His Gly Ser Val Ser Leu Leu Leu Gln Ser  
50 55 60  
Leu Pro Phe Asp Trp Ser Val Val Ser Val Cys Arg Gly Phe Asn Ala  
65 70 75 80  
Pro Pro His Cys Ala Ala Leu Val Ser Leu Ser Leu Glu Leu Leu Ala  
85 90 95  
Arg Leu Thr Arg Ser Ala Ser Ser Pro Gly His Ala Ser Pro Ser Gly  
100 105 110  
Pro Val Ala Leu Thr Val Glu Phe Ala Met Cys Ser Asp Ser Gly Ala  
115 120 125  
Ser Gly Leu Val Phe Cys Ala Phe Tyr Gly Phe  
130 135

&lt;210&gt; 2376

&lt;211&gt; 168

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2376

Met Pro Asp Val Pro Asp Ala Phe Pro Glu Leu Ser Glu Leu Ser Val

1 5 10 15

Ser Gln Leu Thr Asp Met Asn Glu Gln Glu Glu Val Leu Leu Glu Gln

20 25 30

Phe Leu Thr Leu Pro Gln Leu Lys Gln Ile Ile Thr Asp Lys Asp Asp

35 40 45

Leu Val Lys Ser Ile Glu Glu Leu Ala Arg Lys Asn Leu Leu Leu Glu

50 55 60

Pro Ser Leu Glu Ala Lys Arg Gln Thr Val Leu Asp Lys Met Lys Ser

65 70 75 80

Thr Phe Glu Lys Lys Met Gln Arg Gln His Glu Leu Ser Glu Ser Cys

85 90 95

Ser Ala Ser Ala Leu Gln Ala Arg Leu Lys Val Ala Ala His Glu Ala

100 105 110

Glu Glu Glu Ser Asp Asn Ile Ala Glu Asp Phe Leu Glu Gly Lys Met

115 120 125

Glu Ile Asp Asp Phe Leu Ser Ser Phe Met Glu Lys Arg Thr Ile Cys

130 135 140

His Cys Arg Arg Ala Lys Glu Glu Lys Leu Gln Gln Ala Ile Ala Met

145 150 155 160

His Ser Gln Phe His Ala Pro Leu

165

&lt;210&gt; 2377

&lt;211&gt; 352

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2377

Met Pro Ser Gly Val Pro Gly Cys Trp Pro Gln Leu Pro Leu Lys Gly

1 5 10 15

Pro Trp Arg Pro Thr Pro Arg Pro Arg Val Pro Val Pro Trp Arg Thr

20 25 30

Pro Arg Phe Ala Cys Arg Trp Leu Gly Tyr Leu Gly Leu Leu Leu Leu

35 40 45

Asp Val Ile Ile Cys Leu Leu Val Leu Val Gly Leu Ile Arg Ser Ser

50 55 60

Lys Gly Ile Leu Val Gly Val Cys Leu Leu Gly Val Leu Ala Leu Val

65 70 75 80

Ile Ser Trp Gly Ala Leu Gly Leu Glu Leu Ala Val Ser Val Gly Ser

85 90 95

Ser Asp Phe Cys Val Asp Pro Asp Ala Tyr Val Thr Lys Met Val Glu

100 105 110

Glu Tyr Ser Val Leu Ser Gly Asp Ile Leu Gln Tyr Tyr Leu Ala Cys

115 120 125

Ser Pro Arg Ala Ala Asn Pro Phe Gln Gln Lys Leu Ser Gly Ser His

130 135 140

Lys Ala Leu Val Glu Met Gln Asp Val Val Ala Glu Leu Leu Arg Thr

145 150 155 160

Val Pro Trp Glu Gln Pro Ala Thr Lys Asp Pro Leu Leu Arg Val Gln

165 170 175



Glu Val Leu Asn Gly Thr Glu Val Asn Leu Gln His Leu Thr Ala Leu  
180 185 190  
Val Asp Cys Arg Ser Leu His Leu Asp Tyr Val Gln Ala Leu Thr Gly  
195 200 205  
Phe Cys Tyr Asp Gly Val Glu Gly Leu Ile Tyr Leu Ala Leu Phe Ser  
210 215 220  
Phe Val Thr Ala Leu Met Phe Ser Ser Ile Val Cys Ser Val Pro His  
225 230 235 240  
Thr Trp Gln Gln Lys Arg Gly Pro Asp Glu Asp Gly Glu Glu Glu Ala  
245 250 255  
Ala Pro Gly Pro Arg Gln Ala His Asp Ser Leu Tyr Arg Val His Met  
260 265 270  
Pro Ser Leu Tyr Ser Cys Gly Ser Ser Tyr Gly Ser Glu Thr Ser Ile  
275 280 285  
Pro Ala Ala Ala His Thr Val Ser Asn Ala Pro Val Thr Glu Tyr Met  
290 295 300  
Ser Gln Asn Ala Asn Phe Gln Asn Pro Arg Cys Glu Asn Thr Pro Leu  
305 310 315 320  
Ile Gly Arg Glu Ser Pro Pro Pro Ser Tyr Thr Ser Ser Met Arg Ala  
325 330 335  
Lys Tyr Leu Ala Thr Ser Gln Pro Arg Pro Asp Ser Ser Gly Ser His  
340 345 350

&lt;210&gt; 2378

&lt;211&gt; 551

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2378

Met Gln Arg Phe Leu Leu Glu Ile Ser Asn Pro Glu Thr Leu Ser Asn  
1 5 10 15  
Thr Ala Gly Phe Glu Gly Tyr Ile Asp Leu Gly Arg Glu Leu Ser Ser  
20 25 30  
Leu His Ser Leu Leu Trp Glu Ala Val Ser Gln Leu Glu Gln Ser Ile  
35 40 45  
Val Ser Lys Leu Gly Pro Leu Pro Arg Ile Leu Arg Asp Val His Thr  
50 55 60  
Ala Leu Ser Thr Pro Gly Ser Gly Gln Leu Pro Gly Thr Asn Asp Leu  
65 70 75 80  
Ala Ser Thr Pro Gly Ser Gly Ser Ser Ser Ile Ser Ala Gly Leu Gln  
85 90 95  
Lys Met Val Ile Glu Asn Asp Leu Ser Gly Ser Ser Gly Val Gln Pro  
100 105 110  
Ser Pro Ala Arg Ser Ser Ser Tyr Ser Glu Ala Asn Glu Pro Asp Leu  
115 120 125  
Gln Met Ala Asn Gly Gly Lys Ser Leu Ser Met Val Asp Leu Gln Asp  
130 135 140  
Ala Arg Thr Leu Asp Gly Glu Ala Gly Ser Pro Ala Gly Pro Asp Val  
145 150 155 160  
Leu Pro Thr Asp Gly Gln Ala Ala Ala Ala Gln Leu Val Ala Gly Trp  
165 170 175  
Pro Ala Arg Ala Thr Pro Val Asn Leu Ala Gly Leu Ala Thr Val Arg  
180 185 190  
Arg Ala Gly Gln Thr Pro Thr Thr Pro Gly Thr Ser Glu Gly Ala Pro  
195 200 205  
Gly Arg Pro Gln Leu Leu Ala Pro Leu Ser Phe Gln Asn Pro Val Tyr  
210 215 220

Gln Met Ala Ala Gly Leu Pro Leu Ser Pro Arg Gly Leu Gly Asp Ser  
225 230 235 240  
Gly Ser Glu Gly His Ser Ser Leu Ser Ser His Ser Asn Ser Glu Glu  
245 250 255  
Leu Ala Ala Ala Ala Lys Leu Gly Ser Phe Ser Thr Ala Ala Glu Glu  
260 265 270  
Leu Ala Arg Arg Pro Gly Glu Leu Ala Arg Arg Gln Met Ser Leu Thr  
275 280 285  
Glu Lys Gly Gly Gln Pro Thr Val Pro Arg Gln Asn Ser Ala Gly Pro  
290 295 300  
Gln Arg Arg Ile Asp Gln Pro Pro Pro Pro Pro Pro Pro Pro Pro  
305 310 315 320  
Ala Pro Arg Gly Arg Thr Pro Pro Asn Leu Leu Ser Thr Leu Gln Tyr  
325 330 335  
Pro Arg Pro Ser Ser Gly Thr Leu Ala Ser Ala Ser Pro Asp Trp Val  
340 345 350  
Gly Pro Ser Thr Arg Leu Arg Gln Gln Ser Ser Ser Ser Lys Gly Asp  
355 360 365  
Ser Pro Glu Leu Lys Pro Arg Ala Val His Lys Gln Gly Pro Ser Pro  
370 375 380  
Val Ser Pro Asn Ala Leu Asp Arg Thr Ala Ala Trp Leu Leu Thr Met  
385 390 395 400  
Asn Ala Gln Leu Leu Glu Asp Glu Gly Leu Gly Pro Asp Pro Pro His  
405 410 415  
Arg Asp Arg Leu Arg Ser Lys Asp Glu Leu Ser Gln Ala Glu Lys Asp  
420 425 430  
Leu Ala Val Leu Gln Asp Lys Leu Arg Ile Ser Thr Lys Lys Leu Glu  
435 440 445  
Glu Tyr Glu Thr Leu Phe Lys Cys Gln Glu Glu Thr Thr Gln Lys Leu

450                      455                      460  
 Val Leu Glu Tyr Gln Ala Arg Leu Glu Glu Gly Glu Glu Arg Leu Arg  
 465                      470                      475                      480  
 Arg Gln Gln Glu Asp Lys Asp Ile Gln Met Lys Gly Ile Ile Ser Arg  
                     485                      490                      495  
 Leu Met Ser Val Glu Glu Glu Leu Lys Lys Asp His Ala Glu Met Gln  
                     500                      505                      510  
 Ala Ala Val Asp Ser Lys Gln Lys Ile Ile Asp Ala Gln Glu Lys Arg  
                     515                      520                      525  
 Ile Ala Ser Leu Asp Ala Ala Asn Ala Arg Leu Met Ser Ala Leu Thr  
                     530                      535                      540  
 Gln Leu Lys Glu Ser Met His  
 545                      550

<210> 2379

<211> 461

<212> PRT

<213> Homo sapiens

<400> 2379

Met Gly Ala Gly Pro Gln His Ala Thr Leu Gln Ala Tyr Pro Glu Ala  
     1                      5                      10                      15  
 Gly Thr Ile Glu Gly Leu Ala Ser Leu Leu Val Ala Leu Leu Glu Lys  
                     20                      25                      30  
 Thr Thr Trp Val Asp Arg Val His Ile Leu Gln Val Leu Leu Arg Leu  
                     35                      40                      45  
 Leu Pro Asn Met Ser Ser Asp Leu Gln Gly Gln Leu Gln Gly Leu Leu  
                     50                      55                      60

Val His Leu Leu Asn Leu Asp Gln Pro Pro Ser Leu Gln Val Cys Pro  
65 70 75 80  
Leu Ser Cys Pro Gln Phe Ser Ser Pro Pro Thr Gly Pro Gln Gln Pro  
85 90 95  
His Pro His Arg Leu Pro Gln Asp Gln Thr Gln Lys Lys Phe Val Ile  
100 105 110  
Leu Ala Leu Gln Leu Leu Leu Ala Cys Ser Leu Glu Ser Arg Asp Val  
115 120 125  
Val Leu Glu Leu Met Ser Tyr Phe Leu Tyr Ser Pro Val His Cys Arg  
130 135 140  
Pro Glu Leu Lys Lys Leu Leu His Gly Leu Gly Leu Gln Asp Pro Glu  
145 150 155 160  
Gly Phe Leu Phe Lys Glu Met Met Thr Trp Val Gln Gly Pro Asp Leu  
165 170 175  
Asp Ser Lys Ala Gly Leu Arg Thr Cys Cys His Gln Lys Leu Glu Asp  
180 185 190  
Met Ile Gln Glu Leu Gln Glu Thr Pro Ser Gln Thr Ser Val Val Ser  
195 200 205  
Gly Ala Pro Thr Arg Ala Ser Val Ile Pro Ser Gly Thr Ser Trp Ser  
210 215 220  
Ala Ser Gly Ile Phe Gly Arg Leu Ser Gln Val Ser Glu Val Pro Leu  
225 230 235 240  
Met Val Val Ser Pro Ala Glu Pro His Ser Leu Ala Pro Glu Leu Gln  
245 250 255  
Ala Gln Arg Met Leu Ala Pro Thr Arg Ser Trp Gly Thr Pro Gln Leu  
260 265 270  
Arg Leu Arg Val Leu Ser Glu Thr Leu Lys Ser Phe Cys Leu Glu Pro  
275 280 285  
Glu Ala Arg Leu His Pro Ala Gly Pro Ala Gln Leu Pro Gly Glu Pro

290                      295                      300  
Pro Pro Leu Glu Glu Thr Asp Trp Ser His Ser Gln Leu Leu Asp Leu  
305                      310                      315                      320  
Gly Pro Ile Asp Ala Leu Asn Phe Phe Cys Glu Gln Leu Arg Ala Gln  
                         325                      330                      335  
Gln Arg Ser Ser Leu Gln Glu Lys Ala Ala His Pro His Pro Pro Val  
                         340                      345                      350  
Pro Tyr Thr Val Ala Pro Val Pro Asp Met Val Val Pro Pro Pro Arg  
                         355                      360                      365  
Glu His Trp Tyr His Pro Ile Leu Arg Leu Gln Glu Ala Lys Pro Gln  
                         370                      375                      380  
Arg Ser Ala Arg Ser Ala Met Arg Leu Arg Gly Pro Met Pro Ser Arg  
385                      390                      395                      400  
Leu Cys Ala Gly Arg Thr Leu Asp Gly Pro Ile Arg Thr Leu Lys Leu  
                         405                      410                      415  
Pro Leu Pro Arg Val Glu Pro Gln Pro Phe Pro Leu Asp Trp Pro Met  
                         420                      425                      430  
Pro Pro Arg Pro Leu Pro Pro Arg Leu Leu Gln Pro Ala Leu Gln Arg  
                         435                      440                      445  
Tyr Phe Leu Pro Ala Asp Ala Asp Pro Asp Thr Tyr Ser  
                         450                      455                      460

&lt;210&gt; 2380

&lt;211&gt; 722

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2380

Met Glu Cys Cys Gln Thr Leu Val Ser His His Val Asp Pro Ser Leu  
 1 5 10 15  
 Arg Asp Glu Asp Gly Tyr Thr Ala Ala Asp Leu Ala Glu Tyr His Gly  
 20 25 30  
 His Arg Asp Cys Ala Gln Tyr Leu Arg Glu Val Ala Gln Pro Val Pro  
 35 40 45  
 Leu Leu Met Thr Pro Pro Pro Pro Phe Pro Pro Pro Pro Leu Leu  
 50 55 60  
 Ala Thr Arg Arg Ser Leu Glu Asp Gly Arg Arg Gly Gly Pro Gly Pro  
 65 70 75 80  
 Gly Asn Pro Ser Pro Met Ser Leu Ser Pro Ala Trp Pro Gly His Pro  
 85 90 95  
 Asp Gln Pro Leu Pro Arg Glu Gln Met Thr Ser Pro Ala Pro Pro Arg  
 100 105 110  
 Ile Ile Thr Ser Ala Thr Ala Asp Pro Glu Gly Thr Glu Thr Ala Leu  
 115 120 125  
 Ala Gly Asp Thr Ser Asp Gly Leu Ala Ala Leu Gln Leu Asp Gly Leu  
 130 135 140  
 Pro Ser Gly Asp Ile Asp Gly Leu Val Pro Thr Arg Asp Glu Arg Gly  
 145 150 155 160  
 Gln Pro Ile Pro Glu Trp Lys Arg Gln Val Met Val Arg Lys Leu Gln  
 165 170 175  
 Ala Arg Leu Gly Ala Glu Ser Ser Ala Glu Ala Gln Asp Asn Gly Gly  
 180 185 190  
 Ser Ser Gly Pro Thr Glu Gln Ala Ala Trp Arg Tyr Ser Gln Thr His  
 195 200 205  
 Gln Ala Ile Leu Gly Pro Phe Gly Glu Leu Leu Thr Glu Asp Asp Leu  
 210 215 220  
 Val Tyr Leu Glu Lys Gln Ile Ala Asp Leu Gln Leu Arg Arg Arg Cys

225                      230                      235                      240  
Gln Glu Tyr Glu Ser Glu Leu Gly Arg Leu Ala Ala Glu Leu Gln Ala  
                         245                      250                      255  
Leu Leu Pro Glu Pro Leu Val Ser Ile Thr Val Asn Ser His Phe Leu  
                         260                      265                      270  
Pro Arg Ala Pro Gly Leu Glu Val Glu Glu Ala Ser Val Pro Ala Ala  
                         275                      280                      285  
Glu Pro Ser Gly Ser Ala Glu Ala Ser Glu Val Ala Pro Gly Val Gln  
                         290                      295                      300  
Pro Leu Pro Phe Trp Cys Ser His Ile Ser Arg Leu Val Arg Ser Leu  
305                      310                      315                      320  
Ser Leu Leu Leu Lys Gly Val His Gly Leu Val Gln Gly Asp Glu Lys  
                         325                      330                      335  
Pro Ser Thr Arg Pro Leu Gln Asp Thr Cys Arg Glu Ala Ser Ala Ser  
                         340                      345                      350  
Pro Pro Arg Ser Glu Ala Gln Arg Gln Ile Gln Glu Trp Gly Val Ser  
                         355                      360                      365  
Val Arg Thr Leu Arg Gly Asn Phe Glu Ser Ala Ser Gly Pro Leu Cys  
                         370                      375                      380  
Gly Phe Asn Pro Gly Pro Cys Glu Pro Gly Ala Gln His Arg Gln Cys  
385                      390                      395                      400  
Leu Ser Gly Cys Trp Pro Ala Leu Pro Lys Pro Arg Ser Gly Leu Ala  
                         405                      410                      415  
Ser Gly Glu Pro Arg Pro Gly Asp Thr Glu Glu Ala Ser Asp Ser Gly  
                         420                      425                      430  
Ile Ser Cys Glu Glu Val Pro Ser Glu Ala Gly Ala Ala Ala Gly Pro  
                         435                      440                      445  
Asp Leu Ala Ser Leu Arg Lys Glu Arg Ile Ile Met Leu Phe Leu Ser  
                         450                      455                      460



His Trp Arg Arg Ser Ala Tyr Thr Pro Ala Leu Lys Thr Ala Ala Cys  
465 470 475 480  
Arg Thr Leu Gly Ala Arg His Ala Gly Leu Arg Gly Gln Glu Ala Ala  
485 490 495  
Arg Ser Pro Gly Pro Pro Ser Pro Pro Ser Glu Gly Pro Arg Leu Gly  
500 505 510  
His Leu Trp Gln Gln Arg Ser Thr Ile Thr His Leu Leu Gly Asn Trp  
515 520 525  
Lys Ala Ile Met Ala His Val Pro Ala Arg Gln Leu Arg Arg Leu Ser  
530 535 540  
Arg Arg Pro Arg Gly Ala Leu Ser Pro Glu Gln Phe Leu Pro His Val  
545 550 555 560  
Asp Gly Ala Pro Val Pro Tyr Ser Ser Leu Ser Leu Asp Leu Phe Met  
565 570 575  
Leu Gly Tyr Phe Gln Leu Leu Glu Cys Asp Leu Pro Ala Glu Glu Arg  
580 585 590  
Lys Leu Arg His Leu Leu Cys Phe Glu Val Phe Glu His Leu Gly Thr  
595 600 605  
His Gly Trp Glu Ala Val Arg Ala Phe His Lys Ala Val Thr Asp Glu  
610 615 620  
Val Ala Ala Gly Arg Arg Ala Trp Thr Asp Gly Phe Glu Asp Ile Lys  
625 630 635 640  
Ala Arg Phe Phe Gly Ser Ser Gln Arg Pro Ala Trp Asp Thr Glu Pro  
645 650 655  
Gly Arg Lys Ser Gly Leu Thr Leu Leu Gly Pro Leu Pro His Ala Ala  
660 665 670  
Val Pro Cys Ser Gly Pro Glu Pro Thr Ala Gln Arg Leu Gly Ser Arg  
675 680 685  
Ser Gln Gln Gly Ser Phe Asn Gly Glu Asp Ile Cys Gly Tyr Ile Asn

690                      695                      700  
Arg Ser Phe Ala Phe Trp Lys Glu Lys Glu Ala Glu Met Phe Asn Phe  
705                      710                      715                      720  
Gly Glu

<210> 2381

<211> 236

<212> PRT

<213> Homo sapiens

<400> 2381

Met Leu Thr Pro Ser Ser Gln Val His Ala Tyr Ile Ile Ser Ser Leu  
1                      5                      10                      15  
Lys Lys Glu Met Pro Asn Val Phe Gly Lys Glu Ser Lys Lys Lys Glu  
20                      25                      30  
Leu Val Asn Asn Leu Gly Glu Ile Tyr Gln Lys Ile Glu Arg Glu His  
35                      40                      45  
Gln Ile Ser Pro Gly Asp Phe Pro Ser Leu Arg Lys Met Gln Glu Leu  
50                      55                      60  
Leu Gln Thr Gln Asp Phe Ser Lys Phe Gln Ala Leu Lys Pro Lys Leu  
65                      70                      75                      80  
Leu Asp Thr Val Asp Asp Met Leu Ala Asn Asp Ile Ala Arg Leu Met  
85                      90                      95  
Val Met Val Arg Gln Glu Glu Ser Leu Met Pro Ser Gln Val Val Lys  
100                      105                      110  
Gly Gly Ala Phe Asp Gly Thr Met Asn Gly Pro Phe Gly His Gly Tyr  
115                      120                      125

Gly Glu Gly Ala Gly Glu Gly Ile Asp Asp Val Glu Trp Val Val Gly  
 130 135 140  
 Lys Asp Lys Pro Thr Tyr Asp Glu Ile Phe Tyr Thr Leu Ser Pro Val  
 145 150 155 160  
 Asn Gly Lys Ile Thr Gly Ala Asn Ala Lys Lys Glu Met Val Lys Ser  
 165 170 175  
 Lys Leu Pro Asn Thr Val Leu Gly Lys Ile Trp Lys Leu Ala Asp Val  
 180 185 190  
 Asp Lys Asp Gly Leu Leu Asp Asp Glu Glu Phe Ala Leu Ala Asn His  
 195 200 205  
 Leu Ile Lys Val Lys Leu Glu Gly His Glu Leu Pro Ala Asp Leu Pro  
 210 215 220  
 Pro His Leu Val Pro Pro Ser Lys Arg Arg His Glu  
 225 230 235

<210> 2382

<211> 162

<212> PRT

<213> Homo sapiens

<400> 2382

Met Ile Tyr Ser Thr Leu Thr Arg Arg Arg Trp Pro Met Pro Glu Pro  
 1 5 10 15  
 Thr Ser Glu His Leu Asn Leu Arg Pro Cys Leu Ile Tyr Val Leu Phe  
 20 25 30  
 Tyr Val Gln Val Gln Pro Thr Leu Trp Cys Asn Ala Asn Leu Trp Leu  
 35 40 45  
 Tyr Cys Ile Thr Ala Asn Lys Ser Ile Trp Arg Lys Arg His Leu Val

50                      55                      60  
 Lys Gly His Ser Ala Met Glu Cys Asn Ala Ala Met Cys Asn Ala Ala  
 65                      70                      75                      80  
 Tyr Lys Lys Thr Leu Gly Lys Tyr Cys Thr Gly Gln Thr Tyr Asp Pro  
                     85                      90                      95  
 Thr Phe Ser Arg Asn Arg Ala Ala Tyr Trp Met Pro Ser Glu Phe Pro  
                     100                      105                      110  
 Phe Ser Val Ser Thr Leu Leu Phe Asp Ala Met Pro Pro His Lys Ser  
                     115                      120                      125  
 Ile Gln Ala Thr Val Ile Tyr Phe Phe Pro Ser Phe Ser Pro Cys Tyr  
                     130                      135                      140  
 Asn Asp Pro Asn Leu Arg Phe Tyr Phe Val Ile Phe Val Ser Phe Leu  
 145                      150                      155                      160  
 Arg Gln

&lt;210&gt; 2383

&lt;211&gt; 776

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2383

Met Gly Thr Val Pro Asp Pro Leu Arg Ser Ala Lys Thr Ser Leu Ile  
 1                      5                      10                      15  
 Ala Ala Ser Gly Lys Glu Asp Asp Leu Gly Glu Pro Gln Ala Ala Ser  
                     20                      25                      30  
 Pro Arg His Arg Pro Ala Leu Leu Cys Lys Asn Ala Asn Gly Phe Ser  
                     35                      40                      45

Gly Ala Pro Ala Glu Pro Asp Leu Ser Pro Arg Ala Ala Ala Glu Ala  
50 55 60  
Leu Met Gln Val Cys Glu His Glu Thr Thr Gln Pro Asp Met Ser Ser  
65 70 75 80  
Pro Gly Val Phe Asn Glu Val Gln Lys Ala Pro Ala Thr Phe Asn Ser  
85 90 95  
Pro Gly Asn Pro Gln Leu Pro Gly Ser Ser Gln Pro Ala Ala Ser Ala  
100 105 110  
Pro Ser Ser Ala Ala Gly Arg Asp Leu Ile His Thr Pro Leu Thr Met  
115 120 125  
Pro Ala Asn Gln His Thr Cys Gln Ser Ile Pro Gly Asp Gln Pro Asn  
130 135 140  
Ala Ile Thr Ser Ser Met Pro Glu Asp Ser Leu Met Arg Ser Gln Arg  
145 150 155 160  
Thr Ser Asn Arg Glu Gln Pro Glu Lys Pro Ser Cys Pro Val Gly Gly  
165 170 175  
Val Leu Ser Ser Ser Lys Asp Gln Val Ser Cys Glu Phe Pro Ser Pro  
180 185 190  
Glu Thr Ile Gln Gly Thr Val Gln Thr Pro Val Thr Ala Ala Arg Val  
195 200 205  
Val Ser His Ser Ser Ser Pro Val Gly Gly Pro Glu Gly Glu Arg Gln  
210 215 220  
Gly Ala Ile Cys Asp Ser Glu Met Arg Ser Cys Lys Pro Leu Thr Arg  
225 230 235 240  
Glu Ser Gly Cys Ser Glu Asn Lys Gln Pro Ser Val Thr Ala Ser Gly  
245 250 255  
Pro Gln Gly Thr Thr Ser Val Thr Pro Gln Pro Thr Pro Leu Thr Ser  
260 265 270  
Glu Pro Ser Ala Cys Pro Pro Gly Pro Glu Lys Val Pro Leu Pro Ala

|   |     |     |
|---|-----|-----|
| 275   | 280 | 285 |
| Gln Arg Gln Met Ser Arg Phe Lys Glu Ala Ser Thr Met Thr Asn Gln |     |     |
| 290   | 295 | 300 |
| Ala Glu Ser Glu Ile Lys Glu Val Pro Ser Arg Ala Trp Gln Asp Ala |     |     |
| 305   | 310 | 315 |
| Glu Val Gln Ala Val Ala Ser Val Glu Ser Arg Ser Val Ser Thr Ser |     |     |
| 325   | 330 | 335 |
| Pro Ser Ile Leu Thr Ala Phe Leu Lys Glu Ser Arg Ala Pro Glu His |     |     |
| 340   | 345 | 350 |
| Phe Glu Gln Glu Gln Leu Arg Val Ile Cys Arg Ser Ser Gly Ser His |     |     |
| 355   | 360 | 365 |
| Thr Leu Glu Leu Ser Asp Ser Thr Leu Ala Pro Gln Glu Ser Ser Gln |     |     |
| 370   | 375 | 380 |
| Cys Pro Gly Ile Met Pro Gln Val His Ile Gln Ala Ala Ala Ala Glu |     |     |
| 385   | 390 | 395 |
| Ser Thr Ala Phe Gln Arg Glu Asn Lys Leu Ala Ser Leu Pro Gly Gly |     |     |
| 405   | 410 | 415 |
| Val Leu Lys Thr Ser Ser Ile Asn Leu Val Ser Ser Asn Ala Gln His |     |     |
| 420   | 425 | 430 |
| Thr Cys Lys Glu Asp Gly Arg Leu Ala Gly Met Thr Pro Ala Arg Glu |     |     |
| 435   | 440 | 445 |
| Glu Ser Thr Ala Lys Lys Leu Ala Gly Thr Asn Ser Ser Ser Leu Lys |     |     |
| 450   | 455 | 460 |
| Ala Thr Ala Ile Asp Gln Ile Ser Ile Ser Ala Cys Ser Gln Ala Glu |     |     |
| 465   | 470 | 475 |
| Thr Ser Tyr Gly Leu Gly Lys Phe Glu Thr Arg Pro Ser Glu Phe Ala |     |     |
| 485   | 490 | 495 |
| Glu Lys Thr Thr Asn Gly His Lys Thr Asp Pro Asp Cys Lys Leu Ser |     |     |
| 500   | 505 | 510 |

Asp Ser Cys Gly Ser Ile Ser Lys Ala Asp His Ser Gly Ser Leu Asp  
 515 520 525  
 Pro Thr Asn Lys Gly Asp Ala Arg Glu Lys Lys Pro Ala Ser Pro Gln  
 530 535 540  
 Val Val Lys Glu Lys Glu Ser Thr Gly Thr Asp Thr Ser Asp Ala Lys  
 545 550 555 560  
 Thr Leu Leu Leu Asn Pro Lys Ser Gln Glu Ser Gly Gly Thr Glu Ser  
 565 570 575  
 Ala Ala Asn Pro Thr Pro Ser Pro Ile Arg Lys Asn Gln Glu Ser Thr  
 580 585 590  
 Leu Glu Glu Asn Arg Gln Thr Lys Thr Ala Thr Ser Leu Ser Leu Pro  
 595 600 605  
 Ser Asp Pro Met Gly Asp Ser Ser Pro Gly Ser Gly Lys Lys Thr Pro  
 610 615 620  
 Ser Arg Ser Val Lys Ala Ser Pro Arg Arg Pro Ser Arg Val Ser Glu  
 625 630 635 640  
 Phe Leu Lys Glu Gln Lys Leu Asn Val Thr Ala Ala Ala Ala Gln Val  
 645 650 655  
 Gly Leu Thr Pro Gly Asp Lys Lys Lys Gln Leu Gly Ala Asp Ser Lys  
 660 665 670  
 Leu Gln Leu Lys Gln Ser Lys Arg Val Arg Asp Val Val Trp Asp Glu  
 675 680 685  
 Gln Gly Met Thr Trp Glu Val Tyr Gly Ala Ser Leu Asp Ala Glu Ser  
 690 695 700  
 Leu Gly Ile Ala Ile Gln Asn His Leu Gln Arg Gln Ile Arg Glu His  
 705 710 715 720  
 Glu Lys Leu Ile Lys Thr Gln Asn Ser Gln Thr Arg Arg Ser Ile Ser  
 725 730 735  
 Ser Asp Thr Ser Ser Asn Lys Lys Leu Arg Gly Arg Gln His Ser Val

|   |     |     |
|---|-----|-----|
| 740   | 745 | 750 |
| Phe Gln Ser Met Leu Gln Asn Phe Arg Arg Pro Asn Cys Cys Val Arg |     |     |
| 755   | 760 | 765 |
| Pro Ala Pro Ser Ser Val Leu Asp                                 |     |     |
| 770   | 775 |     |

&lt;210&gt; 2384

&lt;211&gt; 168

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2384

|   |     |     |
|---|-----|-----|
| Met Asn Phe Tyr Thr His Glu Val Cys Leu Gly Gly Pro Leu Leu Trp |     |     |
| 1   | 5   | 10  |
| Ala Pro Leu Pro Tyr Asp Gly Ser Ile Cys Ser Leu Leu Phe Gln Glu |     |     |
| 20  | 25  | 30  |
| Asp Leu Arg Pro Thr Ile Asn Gly Ser Gln Ile Gln Ile Pro Leu Gln |     |     |
| 35  | 40  | 45  |
| Ala Ala Asn Val His Pro His Tyr Arg Lys Pro Pro Asp Thr Ser His |     |     |
| 50  | 55  | 60  |
| Leu Leu Ala Ala Gln Asp Thr Gly Thr Gln Ile Leu Ala Cys Pro Glu |     |     |
| 65  | 70  | 75  |
| Gln Trp Leu Ser Arg Pro Gly Arg Gly Ala Arg Ala Gln Ser Gln Ala |     |     |
| 85  | 90  | 95  |
| Gly Leu Pro Ala His Phe Cys Leu Pro Gly His His His Leu Pro Pro |     |     |
| 100   | 105 | 110 |
| Arg Met Asn Leu Lys Leu Gln Gly Asn Glu Glu Lys Pro Arg Ser Glu |     |     |
| 115   | 120 | 125 |



Gly Thr Cys Asn Gln Gly Cys Pro Lys Trp Pro Leu Ser Arg Pro Ile  
 130 135 140  
 Ser Lys Tyr Asn Pro His Arg Gly Cys Leu Val Gly Gln Lys Ser Leu  
 145 150 155 160  
 Gly Leu Val Pro Val Arg Gly Glu  
 165

<210> 2385

<211> 114

<212> PRT

<213> Homo sapiens

<400> 2385

Met Leu Cys Arg Asp Val Ala Pro Glu Gly Ile Ser Val Phe Thr Met  
 1 5 10 15  
 Asp Met Gly Val Trp Asp Arg Leu Ser Cys Lys Gly Ser Val Ser Ile  
 20 25 30  
 Ser Trp Asp Ser His Ser Val Ser Leu Ser Arg Phe Gln Val Thr Ser  
 35 40 45  
 Arg Trp Thr Phe Arg Cys Pro Gly Cys Pro Gln Ala Leu Ser His Asp  
 50 55 60  
 Asp Ser His Phe His Glu Arg His Lys Cys Ile Asn Phe Phe Val Lys  
 65 70 75 80  
 Val Tyr Gly Tyr Met Pro Leu Leu Tyr Thr Gln Phe Arg Val Asp Ser  
 85 90 95  
 Val Leu Phe Lys Thr Arg Leu Pro His Asp Lys Thr Lys Cys Phe Lys  
 100 105 110  
 Phe Ile

&lt;210&gt; 2386

&lt;211&gt; 291

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2386

Met His Asn Lys Arg Lys Arg Pro Arg Lys Lys Ser Pro Arg Ala His

1 5 10 15

Arg Glu Met Leu Glu Ser Ala Val Leu Pro Pro Glu Asp Met Ser Gln

20 25 30

Ser Gly Pro Ser Gly Ser His Pro Gln Gly Pro Arg Gly Ser Pro Thr

35 40 45

Gly Gly Ala Gln Leu Leu Lys Arg Lys Arg Lys Leu Gly Val Val Pro

50 55 60

Val Asn Gly Ser Gly Leu Ser Thr Pro Ala Trp Pro Pro Leu Gln Gln

65 70 75 80

Glu Gly Pro Pro Thr Gly Pro Ala Glu Gly Ala Asn Ser His Thr Thr

85 90 95

Leu Pro Gln Arg Arg Arg Leu Gln Lys Lys Lys Ala Gly Pro Gly Ser

100 105 110

Leu Glu Leu Cys Gly Leu Pro Ser Gln Lys Thr Ala Ser Leu Lys Lys

115 120 125

Arg Lys Lys Met Arg Val Met Ser Asn Leu Val Glu His Asn Gly Val

130 135 140

Leu Glu Ser Glu Ala Gly Gln Pro Gln Ala Leu Gly Ser Ser Gly Thr

145 150 155 160

Cys Ser Ser Leu Lys Lys Gln Lys Leu Arg Ala Glu Ser Asp Phe Val  
                     165                    170                    175  
 Lys Phe Asp Thr Pro Phe Leu Pro Lys Pro Leu Phe Phe Arg Arg Ala  
                     180                    185                    190  
 Lys Ser Ser Thr Ala Thr His Pro Pro Gly Pro Ala Val Gln Leu Asn  
                     195                    200                    205  
 Lys Thr Pro Ser Ser Ser Lys Lys Val Thr Phe Gly Leu Asn Arg Asn  
                     210                    215                    220  
 Met Thr Ala Glu Phe Lys Lys Thr Asp Lys Ser Ile Leu Val Ser Pro  
 225                    230                    235                    240  
 Thr Gly Pro Ser Arg Val Ala Phe Asp Pro Glu Gln Lys Pro Leu His  
                     245                    250                    255  
 Gly Val Leu Lys Thr Pro Thr Ser Ser Pro Ala Ser Ser Pro Leu Val  
                     260                    265                    270  
 Ala Lys Lys Pro Leu Thr Thr Thr Pro Arg Arg Arg Pro Arg Ala Met  
                     275                    280                    285  
 Asp Phe Phe  
                     290

<210> 2387

<211> 241

<212> PRT

<213> Homo sapiens

<400> 2387

Met Asn His Glu Trp Ile Gly Asn Glu Trp Leu Pro Ser Leu Gly Leu  
                     1                    5                    10                    15  
 Pro Gln Tyr Arg Ser Tyr Phe Met Glu Cys Leu Val Asp Ala Arg Met

20 25 30  
Leu Asp His Leu Thr Lys Lys Asp Leu Arg Gly Gln Leu Lys Met Val  
35 40 45  
Asp Ser Phe His Arg Asn Ser Phe Gln Cys Gly Ile Met Cys Leu Arg  
50 55 60  
Arg Leu Asn Tyr Asp Arg Lys Glu Leu Glu Arg Lys Arg Glu Glu Ser  
65 70 75 80  
Gln Ser Glu Ile Lys Asp Val Leu Val Trp Ser Asn Asp Arg Val Ile  
85 90 95  
Arg Trp Ile Leu Ser Ile Gly Leu Lys Glu Tyr Ala Asn Asn Leu Ile  
100 105 110  
Glu Ser Gly Val His Gly Ala Leu Leu Ala Leu Asp Glu Thr Phe Asp  
115 120 125  
Phe Ser Ala Leu Ala Leu Leu Leu Gln Ile Pro Thr Gln Asn Thr Gln  
130 135 140  
Ala Arg Ala Val Leu Glu Arg Glu Phe Asn Asn Leu Leu Val Met Gly  
145 150 155 160  
Thr Asp Arg Arg Phe Asp Glu Asp Asp Asp Lys Ser Phe Arg Arg Ala  
165 170 175  
Pro Ser Trp Arg Lys Lys Phe Arg Pro Lys Asp Ile Arg Gly Leu Ala  
180 185 190  
Ala Gly Ser Ala Glu Thr Leu Pro Ala Asn Phe Arg Val Thr Ser Ser  
195 200 205  
Met Ser Ser Pro Ser Met Gln Pro Lys Lys Met Gln Met Asp Gly Asn  
210 215 220  
Val Ser Gly Thr Gln Arg Leu Asp Ser Ala Thr Val Arg Thr Tyr Ser  
225 230 235 240  
Cys

&lt;210&gt; 2388

&lt;211&gt; 144

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2388

Met Pro Gln Ile Glu Gly Trp Ser His Arg Leu Pro Arg Leu Ser Pro

1 5 10 15

Leu Pro Val Thr Arg Pro His Ser Phe Leu Pro Pro Arg Arg Ser Gln

20 25 30

Gly Gly Arg Ser Arg Leu Asp Ala Phe Leu Thr Pro Phe Gln Val Ala

35 40 45

Pro Asp Ala Gly His Trp Glu Val Ala Thr Trp Gly His Gly His Glu

50 55 60

Gly Trp Val Ser Val Gly Thr Arg Arg Ala Gly Cys Trp Thr Pro Thr

65 70 75 80

His Pro Val Ser Cys Thr Arg Pro Tyr Ser Leu Cys Ser Gly Pro Gln

85 90 95

Glu Ala Val Arg Ile Gly Gly Val Pro Leu Thr Gly Pro Gly Ala Phe

100 105 110

His Leu Gly Ser Cys His Val His Pro Gln Ala Ser Asp Ser Trp Pro

115 120 125

Arg Gly Arg Trp Cys Gly Pro Gln Ala Val Cys Ala Asp Ala Ala Arg

130 135 140

&lt;210&gt; 2389

&lt;211&gt; 113

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2389

Met Phe Ser Ser Lys Ser Phe Lys Val Leu Ala Leu Ile Phe Arg Leu

1 5 10 15

Leu Ile His Ile Glu Leu Asn Phe Val Tyr Gly Met Ile Asn Phe Ile

20 25 30

Tyr Asp Met Leu Tyr Met Gly Ser Thr Ser Phe Tyr Gly Tyr Leu Val

35 40 45

Val Gln Ala Leu Phe Val Glu Glu Ser Phe Leu Cys Pro Leu Asn Gly

50 55 60

Leu Val Thr Leu Val Glu Asn Lys Pro Tyr Arg Pro Met Leu Ala Ile

65 70 75 80

Gly Phe Ile Ser Gly Leu Ser Ile Leu Phe His Trp Phe Val Cys Val

85 90 95

Phe Leu Ser Leu Asn Asn Thr Ile Leu Ile Ile Val Leu Cys Ser Lys

100 105 110

Phe

&lt;210&gt; 2390

&lt;211&gt; 124

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2390

Met Val Val Val Leu Ala Tyr Ile Pro Thr Ile Ser Val Lys Ala Phe  
 1 5 10 15  
 Phe His His Val Cys Ala Asn Ile Asn Phe Cys Phe Phe Cys Phe Cys  
 20 25 30  
 Phe Cys Phe Phe Phe Glu Met Glu Ser Arg Ser Val Thr Gln Ala Gly  
 35 40 45  
 Val Gln Trp Cys Asp Ile Ser Ser Leu Gln Pro Leu Pro Pro Gly Phe  
 50 55 60  
 Lys Gln Phe Phe Cys Leu Ser Leu Leu Ser Ser Trp Asp Tyr Arg Gln  
 65 70 75 80  
 Leu Pro Pro Cys Leu Ala Asn Phe Cys Ile Phe Ser Arg Asp Ser Val  
 85 90 95  
 Ser Pro Cys Trp Ser Gly Trp Ser Gln Thr Pro Asp Leu Leu Ile Arg  
 100 105 110  
 Pro Pro Arg Pro Pro Lys Val Leu Gly Leu Gln Ala  
 115 120

&lt;210&gt; 2391

&lt;211&gt; 163

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2391

Met Ala Trp Arg Pro Pro Ser Pro Asp Leu Gly Pro Gln Ala Gln Gly  
 1 5 10 15  
 His Ile Glu Gln Glu Asp Gly Ala Leu Pro His Ser Gly Glu Ala Glu  
 20 25 30  
 Arg Gly Asp Leu Pro Pro Leu Gly Pro Leu Leu Thr Pro Ser Leu Pro

35                      40                      45  
 Pro Thr Pro Glu Thr Ser Pro Leu Pro Thr Gly Leu Ala Thr Leu Leu  
 50                      55                      60  
 Thr Trp Pro Val Leu Asp Leu Val Asp Val Ala Ala Val Gln Arg Lys  
 65                      70                      75                      80  
 Glu Arg Leu Arg Trp Gln Ser Arg Pro Leu Ser Leu Pro Lys Leu Ser  
 85                      90                      95  
 Asn Phe Ser Pro Phe Leu Pro Pro Arg Lys Leu Ala Ala Gln Ser His  
 100                      105                      110  
 Val Gln Asn Pro Ala Gly His Leu His Gly Ala Asn Tyr Gln Gln Val  
 115                      120                      125  
 Ser Phe Leu Arg His Arg Val Gln Ala Ala Thr Pro Ala Pro Glu Met  
 130                      135                      140  
 Lys Gly Gln Leu Cys Lys Asp Pro Glu Pro Ala Pro Arg Gly Pro Glu  
 145                      150                      155                      160  
 Pro Pro Thr

<210> 2392

<211> 175

<212> PRT

<213> Homo sapiens

<400> 2392

Met His Ala His Lys Gln Ala Ser Thr His Val His Ile Thr His Thr  
 1                      5                      10                      15  
 Ser Arg His Ser Cys Thr Asp Ser Tyr Thr Gly His Val Pro Ala Arg  
 20                      25                      30



Thr Cys Thr His Thr His Ala Gln Ala Leu Met His Arg Cys Thr His  
 35 40 45  
 Thr Gln Gly Met Tyr Leu His Thr Arg Val Asn Thr Arg Thr Gly Thr  
 50 55 60  
 His Ala Asp Ala Arg Ile His Ser Ala Ser Thr Cys Thr Arg Val His  
 65 70 75 80  
 Ile His Ala His Ala Gly Thr His Ala Gln Met His Thr Gln Cys Thr  
 85 90 95  
 Tyr Leu His Thr Arg Val His Thr His Thr His Arg His Ser Cys Pro  
 100 105 110  
 Asp Ala Asn Ile His Cys Thr Tyr Leu His Thr Arg Ala His Thr His  
 115 120 125  
 Ala Gln Ala Leu Met Gln Thr Tyr Ala Gln Cys Thr Tyr Leu His Thr  
 130 135 140  
 Arg Thr His Thr His Thr Gln Ala Leu Met His Arg Cys Thr His Thr  
 145 150 155 160  
 Gln Cys Thr Tyr Leu His Thr Arg Val His Ala His Thr Val Pro  
 165 170 175

&lt;210&gt; 2393

&lt;211&gt; 189

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2393

Met Pro Glu Gln Ser Asn Asp Tyr Arg Val Ala Val Phe Gly Ala Gly  
 1 5 10 15  
 Gly Val Gly Lys Ser Ser Leu Val Leu Arg Phe Val Lys Gly Thr Phe

|   |     |     |
|---|-----|-----|
| 20  | 25  | 30  |
| Arg Glu Ser Tyr Ile Pro Thr Val Glu Asp Thr Tyr Arg Gln Val Ile |     |     |
| 35  | 40  | 45  |
| Ser Cys Asp Lys Ser Ile Cys Thr Leu Gln Ile Thr Asp Thr Thr Gly |     |     |
| 50  | 55  | 60  |
| Ser His Gln Phe Pro Ala Met Gln Arg Leu Ser Ile Ser Ile Thr Ser |     |     |
| 65  | 70  | 75  |
| Arg Gln Ser Leu Glu Glu Leu Lys Pro Ile Tyr Glu Gln Ile Cys Glu |     |     |
| 85  | 90  | 95  |
| Ile Lys Gly Asp Val Glu Ser Ile Pro Ile Met Leu Val Gly Asn Lys |     |     |
| 100   | 105 | 110 |
| Cys Asp Glu Ser Pro Ser Arg Glu Val Gln Ser Ser Glu Ala Glu Ala |     |     |
| 115   | 120 | 125 |
| Leu Ala Arg Thr Trp Lys Cys Ala Phe Met Glu Thr Ser Ala Lys Leu |     |     |
| 130   | 135 | 140 |
| Asn His Asn Val Lys Glu Leu Phe Gln Glu Leu Leu Asn Leu Glu Lys |     |     |
| 145   | 150 | 155 |
| Arg Arg Thr Val Ser Leu Gln Ile Asp Gly Lys Lys Ser Lys Gln Gln |     |     |
| 165   | 170 | 175 |
| Lys Arg Lys Glu Lys Leu Lys Gly Lys Cys Val Ile Met             |     |     |
| 180   | 185 |     |

&lt;210&gt; 2394

&lt;211&gt; 190

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2394

Met Ala Ala Ser Gln Gln Gln Ala Ser Ala Ala Ser Ser Ala Ala Gly  
1 5 10 15  
Val Ser Gly Pro Ser Ser Ala Gly Gly Pro Gly Pro Gln Gln Gln Pro  
20 25 30  
Gln Pro Pro Ala Gln Leu Val Gly Pro Ala Gln Ser Gly Leu Leu Gln  
35 40 45  
Arg Tyr Lys Met Leu Ile Pro Gln Leu Lys Glu Ser Leu Gln Thr Leu  
50 55 60  
Met Lys Val Ala Ala Gln Asn Leu Ile Gln Asn Thr Asn Ile Asp Asn  
65 70 75 80  
Gly Gln Lys Ser Ser Asp Gly Pro Ile Gln Arg Phe Asp Lys Cys Leu  
85 90 95  
Glu Glu Phe Tyr Ala Leu Cys Asp Gln Leu Glu Leu Cys Leu Arg Leu  
100 105 110  
Ala His Glu Cys Leu Ser Gln Ser Cys Asp Ser Ala Lys His Ser Pro  
115 120 125  
Thr Leu Val Pro Thr Ala Thr Lys Pro Asp Ala Val Gln Pro Asp Ser  
130 135 140  
Leu Pro Tyr Pro Gln Tyr Leu Ala Val Ile Lys Ala Gln Ile Ser Cys  
145 150 155 160  
Ala Lys Asp Ile His Thr Ala Leu Leu Asp Cys Ala Asn Lys Val Thr  
165 170 175  
Gly Lys Thr Pro Ala Pro Pro Ala Gly Pro Gly Gly Thr Leu  
180 185 190

&lt;210&gt; 2395

&lt;211&gt; 174

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2395

Met Ser Glu Phe Pro Phe Thr Thr Asn Arg Ile Lys Tyr Leu Gly Ile  
 1 5 10 15  
 Gln Leu Thr Arg Asp Val Lys Asp Leu Phe Lys Glu His Tyr Lys Pro  
 20 25 30  
 Leu Leu Lys Glu Ile Arg Gly His Lys Gln Met Glu Lys Asn Ile Leu  
 35 40 45  
 Cys Ser Trp Ile Gly Arg Ile Asn Ile Val Lys Met Ala Ile Leu Pro  
 50 55 60  
 Lys Val Ile Tyr Arg Phe Lys Ala Thr Pro Ile Lys Leu Pro Leu Thr  
 65 70 75 80  
 Phe Phe Ala Glu Leu Glu Lys Thr Thr Leu Asn Phe Leu Trp Asn His  
 85 90 95  
 Lys Arg Ala His Ile Val Lys Thr Ile Leu Ser Lys Lys Lys Ala Gly  
 100 105 110  
 Gly Ile Arg Leu Pro Asp Phe Lys Leu Tyr Tyr Lys Ala Asn Gln Asn  
 115 120 125  
 Thr Tyr Arg Gly Gln Trp Asn Arg Thr Glu Thr Ser Glu Ile Thr Pro  
 130 135 140  
 Asp Ile Tyr Leu Gly Ile Gln Leu Val Ser Asn Ser Arg Pro Gln Val  
 145 150 155 160  
 Ile Leu Leu Pro Trp Pro Pro Lys Val Leu Gly Leu Gln Ala  
 165 170

&lt;210&gt; 2396

&lt;211&gt; 141

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2396

Met Leu Ala Cys Cys Ser Pro Pro Thr Met Gln Pro Gly Ser Tyr Gln

1 5 10 15

Ala Thr Asp Gln Tyr Gln Ser Thr Ala Gln Gly Leu Gly Thr Pro Gly

20 25 30

Val Ser Ser Gly Ser Phe Ala Leu Pro Met Pro Pro Gly Leu Ala Ala

35 40 45

Val Leu Glu Thr Gly Val Ser Arg Arg Leu Cys Ser Trp Trp Ala Gly

50 55 60

Ala Glu Met Ala Glu Ala His Pro Ile Ile Cys Gln Lys Glu Asp Thr

65 70 75 80

Leu Val Ser Pro Gly Leu Gly Thr Leu Gln Phe Ala Ala Leu Leu Arg

85 90 95

Leu Ala Ser Gly Gln Leu Leu Thr Leu Pro Leu Thr Pro Gln Ser Gln

100 105 110

Ala Pro Asp Ala Pro Trp Thr Ser Pro Thr Pro Arg Val Ile Trp Ser

115 120 125

Gly Ser Ala Gly Val Thr Leu Ser Leu Thr Lys Gly Phe

130 135 140

&lt;210&gt; 2397

&lt;211&gt; 445

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2397

|     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| Met | Pro | Asn | Ser | Ser | Pro | Lys | Asp | Pro | Thr | Thr | Ala | Ser | Gly | Asn | Gly |
| 1   |     |     |     | 5   |     |     |     |     | 10  |     |     |     |     | 15  |     |
| Ser | Lys | Val | Glu | Arg | Glu | Lys | Arg | Lys | Asp | Glu | Leu | Leu | Asn | Ile | Ala |
|     |     |     | 20  |     |     |     |     | 25  |     |     |     |     | 30  |     |     |
| Lys | Ser | Lys | Gln | Glu | Arg | Thr | Asn | Ser | Glu | Leu | His | Asn | Leu | Arg | Gln |
|     |     | 35  |     |     |     |     | 40  |     |     |     |     | 45  |     |     |     |
| Ile | Tyr | Val | Lys | Gln | Gln | Ser | Asp | Leu | Gln | Phe | Leu | Asn | Phe | Asn | Val |
|     | 50  |     |     |     |     | 55  |     |     |     |     | 60  |     |     |     |     |
| Glu | Asn | Ser | Gln | Glu | Leu | Ile | Gln | Met | Tyr | Asp | Ser | Lys | Met | Glu | Glu |
| 65  |     |     |     |     | 70  |     |     |     |     | 75  |     |     |     | 80  |     |
| Ser | Lys | Ala | Leu | Asp | Ser | Ser | Arg | Asp | Met | Cys | Leu | Ser | Asp | Leu | Glu |
|     |     |     | 85  |     |     |     |     |     | 90  |     |     |     | 95  |     |     |
| Asn | Asn | His | Pro | Lys | Val | Asp | Ile | Lys | Arg | Glu | Lys | Asn | Gln | Lys | Ser |
|     |     |     | 100 |     |     |     |     | 105 |     |     |     |     | 110 |     |     |
| Leu | Phe | Lys | Asp | Gln | Lys | Phe | Glu | Ala | Met | Leu | Val | Gln | Gln | Asn | Arg |
|     |     | 115 |     |     |     |     | 120 |     |     |     |     |     | 125 |     |     |
| Ser | Asp | Lys | Ser | Ser | Cys | Asp | Glu | Cys | Lys | Glu | Lys | Lys | Gln | Gln | Ile |
|     | 130 |     |     |     |     | 135 |     |     |     |     | 140 |     |     |     |     |
| Asp | Thr | Val | Phe | Gly | Glu | Lys | Ser | Val | Ile | Thr | Leu | Ser | Ser | Ile | Phe |
| 145 |     |     |     |     | 150 |     |     |     |     | 155 |     |     |     | 160 |     |
| Thr | Lys | Asp | Leu | Val | Glu | Lys | His | Asn | Leu | Pro | Trp | Ser | Leu | Gly | Gly |
|     |     |     | 165 |     |     |     |     |     | 170 |     |     |     | 175 |     |     |
| Lys | Thr | Gln | Ile | Glu | Pro | Glu | Asn | Lys | Ile | Thr | Leu | Cys | Lys | Ile | His |
|     |     | 180 |     |     |     |     |     | 185 |     |     |     |     | 190 |     |     |
| Thr | Lys | Ser | Pro | Lys | Cys | His | Gly | Thr | Gly | Val | Gln | Asn | Glu | Gly | Lys |
|     |     | 195 |     |     |     |     | 200 |     |     |     |     |     | 205 |     |     |
| Gln | Pro | Ser | Glu | Thr | Pro | Thr | Leu | Ser | Asp | Glu | Lys | Gln | Trp | His | Asp |
|     | 210 |     |     |     |     |     | 215 |     |     |     |     |     | 220 |     |     |

Val Ser Val Tyr Leu Gly Leu Thr Asn Cys Pro Ser Ser Lys His Pro  
225 230 235 240  
Glu Lys Leu Asp Val Glu Cys Gln Asp Gln Met Glu Arg Ser Glu Ile  
245 250 255  
Ser Cys Cys Gln Lys Asn Glu Ala Cys Leu Gly Glu Ser Gly Met Cys  
260 265 270  
Asp Ser Lys Cys Cys His Pro Ser Asn Phe Ile Ile Glu Ala Pro Gly  
275 280 285  
His Met Ser Asp Val Glu Trp Met Ser Ile Phe Lys Pro Ser Lys Met  
290 295 300  
Gln Arg Ile Val Arg Leu Lys Ser Gly Cys Thr Cys Ser Glu Ser Ile  
305 310 315 320  
Cys Gly Thr Gln His Asp Ser Pro Ala Ser Glu Leu Ile Ala Ile Gln  
325 330 335  
Asp Ser His Ser Leu Gly Ser Ser Lys Ser Ala Leu Arg Glu Asp Glu  
340 345 350  
Thr Glu Ser Ser Ser Asn Lys Lys Asn Ser Pro Thr Ser Leu Leu Ile  
355 360 365  
Tyr Lys Asp Ala Pro Ala Phe Asn Glu Lys Ala Ser Ile Val Leu Pro  
370 375 380  
Ser Gln Asp Asp Phe Ser Pro Thr Ser Lys Leu Gln Arg Leu Leu Ala  
385 390 395 400  
Glu Ser Arg Gln Met Val Thr Asp Leu Glu Leu Ser Thr Leu Leu Pro  
405 410 415  
Ile Ser His Glu Asn Leu Thr Gly Ser Ala Thr Asn Lys Ser Glu Val  
420 425 430  
Pro Glu Glu Ser Ala Gln Lys Asn Thr Phe Val Ser Tyr  
435 440 445

&lt;210&gt; 2398

&lt;211&gt; 339

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2398

Met Glu Lys Gly Leu Ser Ser Thr Ile Arg Val Val Gly His Val Pro

1 5 10 15

Gly Glu Phe Pro Val Ser Val Trp Val Thr Ala Ala Asp Cys Trp Met

20 25 30

Cys Gln Pro Val Ala Arg Gly Phe Val Val Leu Pro Ile Thr Glu Phe

35 40 45

Leu Val Gly Asp Leu Val Val Thr Gln Asn Thr Ser Leu Pro Trp Pro

50 55 60

Ser Ser Tyr Leu Thr Lys Thr Val Leu Lys Val Ser Phe Leu Leu His

65 70 75 80

Asp Pro Ser Asn Phe Leu Lys Thr Ala Leu Phe Leu Tyr Ser Trp Asp

85 90 95

Phe Gly Asp Gly Thr Gln Met Val Thr Glu Asp Ser Val Val Tyr Tyr

100 105 110

Asn Tyr Ser Ile Ile Gly Thr Phe Thr Val Lys Leu Lys Val Val Ala

115 120 125

Glu Trp Glu Glu Val Glu Pro Asp Ala Thr Arg Ala Val Lys Gln Lys

130 135 140

Thr Gly Asp Phe Ser Ala Ser Leu Lys Leu Gln Glu Thr Leu Arg Gly

145 150 155 160

Ile Gln Val Leu Gly Pro Thr Leu Ile Gln Thr Phe Gln Lys Met Thr

165 170 175



Val Thr Leu Asp Phe Leu Gly Ser Pro Pro Leu Thr Val Cys Trp Arg  
180 185 190  
Leu Lys Pro Glu Cys Leu Pro Leu Glu Glu Gly Glu Cys His Pro Val  
195 200 205  
Ser Val Ala Ser Thr Ala Tyr Asn Leu Thr His Thr Phe Arg Asp Pro  
210 215 220  
Gly Asp Tyr Cys Phe Ser Ile Arg Ala Glu Asn Ile Ile Ser Lys Thr  
225 230 235 240  
His Gln Tyr His Lys Ile Gln Val Trp Pro Ser Arg Ile Gln Pro Ala  
245 250 255  
Val Phe Ala Phe Pro Cys Ala Thr Leu Ile Thr Val Met Leu Ala Phe  
260 265 270  
Ile Met Tyr Met Thr Leu Arg Asn Ala Thr Gln Gln Lys Asp Met Val  
275 280 285  
Glu Asn Pro Glu Pro Pro Ser Gly Val Arg Cys Cys Cys Gln Met Cys  
290 295 300  
Cys Gly Pro Phe Leu Leu Glu Thr Pro Ser Glu Tyr Leu Glu Ile Val  
305 310 315 320  
Arg Glu Asn His Gly Leu Leu Pro Pro Leu Tyr Lys Ser Val Lys Thr  
325 330 335  
Tyr Thr Val

&lt;210&gt; 2399

&lt;211&gt; 196

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2399

Met Ser Pro Trp Lys Asp Gly Gly Ser Leu Val Glu Val Tyr Leu Leu  
 1 5 10 15  
 Asp Thr Ser Ile Gln Ser Asp His Arg Glu Ile Glu Gly Arg Val Met  
 20 25 30  
 Val Thr Asp Phe Glu Asn Val Pro Glu Glu Asp Gly Thr Arg Phe His  
 35 40 45  
 Arg Gln Ala Ser Lys Cys Asp Ser His Gly Thr His Leu Ala Gly Val  
 50 55 60  
 Val Ser Gly Arg Asp Ala Gly Val Ala Lys Gly Ala Ser Met Arg Ser  
 65 70 75 80  
 Leu Arg Val Leu Asn Cys Gln Gly Lys Gly Thr Val Ser Gly Thr Leu  
 85 90 95  
 Ile Gly Leu Glu Phe Ile Arg Lys Ser Gln Leu Val Gln Pro Val Gly  
 100 105 110  
 Pro Leu Val Val Leu Leu Pro Leu Ala Gly Gly Tyr Ser Arg Val Leu  
 115 120 125  
 Asn Ala Ala Cys Gln Arg Leu Ala Arg Ala Gly Val Val Leu Val Thr  
 130 135 140  
 Ala Ala Gly Asn Phe Arg Asp Asp Ala Cys Leu Tyr Ser Pro Ala Ser  
 145 150 155 160  
 Ala Pro Glu Gly Arg Thr Ser Leu Val Pro Pro Ala Thr Ala Ala Pro  
 165 170 175  
 Ala Leu Cys His Arg Val Gly His His Arg Leu Leu Pro Thr Trp Leu  
 180 185 190  
 Ala Leu Gln Pro  
 195

&lt;210&gt; 2400

&lt;211&gt; 102

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2400

Met Cys His Tyr Ala Trp Leu Ile Phe Val Glu Met Arg Phe His His  
1 5 10 15  
Val Ala Gln Ala Gly Leu Tyr Leu Leu Ser Ser Ser Asp Leu Pro Ala  
20 25 30  
Ser Ala Ser Gln Cys Trp Val Cys Arg His Glu Pro Leu Cys Pro Val  
35 40 45  
Arg Met Ala Ile Leu Met Ile Lys Ala Lys Ile Phe Ile Leu Leu Ser  
50 55 60  
Arg Phe Gly Ile His Ile Pro Glu Asn Ser Met Ile His Pro Leu Thr  
65 70 75 80  
Thr Asn Phe Arg Lys Gln Ala Val Leu Phe His Ser Leu Lys Asn Asn  
85 90 95  
Arg Ser Pro Ser Asn Lys  
100

&lt;210&gt; 2401

&lt;211&gt; 117

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2401

Met Lys Phe Phe His Asp Leu Asp Val Ile Leu Gln Tyr Glu Pro Ala

|     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| 1   | 5   | 10  | 15  |     |     |     |     |     |     |     |     |     |     |     |     |
| Thr | Gln | Phe | Thr | Glu | Glu | Asp | Ala | Asn | Gly | Arg | Tyr | Leu | Glu | Thr | Leu |
|     | 20  |     | 25  |     | 30  |     |     |     |     |     |     |     |     |     |     |
| Ser | Pro | Ser | Thr | Ala | Pro | Glu | Thr | Thr | Glu | Glu | Phe | Leu | Leu | Val | Cys |
|     | 35  |     | 40  |     | 45  |     |     |     |     |     |     |     |     |     |     |
| Asp | Thr | Arg | Lys | Lys | Gly | Arg | Lys | Arg | Lys | Cys | Leu | Phe | His | Cys | Trp |
|     | 50  |     | 55  |     | 60  |     |     |     |     |     |     |     |     |     |     |
| Asp | Gln | Pro | His | Ala | Ser | Gly | Lys | Met | Ser | Ile | Ala | Ser | Val | Asp | Lys |
|     | 65  |     | 70  |     | 75  |     |     |     |     |     |     |     |     |     | 80  |
| Glu | Asp | Val | Ser | Gly | Asn | Pro | Leu | Leu | Leu | Val | Ser | His | Val | Arg | Pro |
|     |     |     | 85  |     | 90  |     |     |     |     |     |     |     |     |     | 95  |
| Met | Glu | Leu | Gly | Thr | Leu | Arg | Gln | Tyr | Trp | Asn | Pro | Leu | Ile | Ile | Gln |
|     |     |     | 100 |     | 105 |     |     |     |     |     |     |     |     |     | 110 |
| Leu | Leu | Thr | Gln | Leu |     |     |     |     |     |     |     |     |     |     |     |
|     |     |     | 115 |     |     |     |     |     |     |     |     |     |     |     |     |

&lt;210&gt; 2402

&lt;211&gt; 103

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2402

|     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| Met | Gln | Ser | Lys | Leu | Ile | Leu | Ser | Leu | Cys | Thr | Phe | Val | Ser | Ala | Gly |
| 1   |     | 5   |     | 10  |     | 15  |     |     |     |     |     |     |     |     |     |
| His | Cys | Leu | Phe | Arg | Glu | Leu | Val | Ala | Gln | Gly | Leu | His | Met | Gly | Ala |
|     |     | 20  |     | 25  |     | 30  |     |     |     |     |     |     |     |     |     |
| Lys | Met | Val | Val | Asp | Thr | Pro | Trp | Cys | Thr | Phe | Cys | Phe | Thr | Cys | Phe |
|     |     | 35  |     | 40  |     | 45  |     |     |     |     |     |     |     |     |     |

Leu Arg Leu Phe His Lys Ser Cys Glu Ala Lys Lys Gln Asn Lys Thr  
 50 55 60  
 Lys Gln Pro Asn Lys Tyr Asn Leu Thr Phe Thr Gln Ser Thr Ala Gly  
 65 70 75 80  
 Asn Gln Arg Ser Gly Trp Asn Glu Arg Lys Tyr Ala Lys Arg Ser Phe  
 85 90 95  
 Leu Ser Leu Ile Ser Cys Leu  
 100

<210> 2403

<211> 172

<212> PRT

<213> Homo sapiens

<400> 2403

Met Gln Glu Gly Pro Ser Gly Ala Gly Leu Gly Pro His Ile Gly Leu  
 1 5 10 15  
 Pro Gly His Leu Ile Tyr Leu Gly Ser Asn Lys Glu Pro Trp Arg Gln  
 20 25 30  
 Ala Arg Ala Val Ala Lys Arg Pro Arg Ser Cys Gly Thr Arg Leu Val  
 35 40 45  
 Pro Ala Ser Val Pro Leu Ser Leu Glu Phe Gly Arg Ala Leu Ser Ser  
 50 55 60  
 Ala Gly Val Cys Ser Arg Pro Met Pro Glu Val Gly Pro Leu Ala Ile  
 65 70 75 80  
 Val Ser Ile Gly Gly Val Ser Ser Pro Pro Ser Gly Asn Pro Tyr Ser  
 85 90 95  
 Gly Thr Leu His Cys Cys Gly Gly Val His Thr Gly Gly Cys Glu Ser

|   |     |     |     |
|---|-----|-----|-----|
| 100   | 105 | 110 |     |
| His Cys Ala Val Leu Ala Gln Gly Ser Gly Lys Gly Phe Trp Glu Gly |     |     |     |
| 115   | 120 | 125 |     |
| Met Gly Thr Lys Leu Asp Leu Asn Asp Glu Ala Glu Leu Val Ser Gln |     |     |     |
| 130   | 135 | 140 |     |
| Ala Arg Gly Val Gln Arg Asp His Ser Ala Glu Ala Lys Ala Val Lys |     |     |     |
| 145   | 150 | 155 | 160 |
| Lys Val Ala Trp Met Val Thr His Arg Ser Arg Ala                 |     |     |     |
| 165   | 170 |     |     |

&lt;210&gt; 2404

&lt;211&gt; 711

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2404

|   |    |    |    |
|---|----|----|----|
| Met Leu Ala Ser Leu Lys Val Lys Lys Gln Glu Leu Ala Asn Ser Ser |    |    |    |
| 1   | 5  | 10 | 15 |
| Asp Ala Thr Leu Pro Asp Arg Pro Leu Ser Pro Pro Leu Thr Ala Pro |    |    |    |
| 20  | 25 | 30 |    |
| Pro Thr Met Lys Ser Ser Glu Phe Phe Glu Met Leu Glu Lys Met Gln |    |    |    |
| 35  | 40 | 45 |    |
| Gly Ile Lys Leu Glu Glu Gln Lys Pro Gly Pro Gln Lys Asn Lys Asp |    |    |    |
| 50  | 55 | 60 |    |
| Asp Tyr Ile Pro Tyr Pro Ser Ile Asp Glu Val Val Glu Lys Gly Gly |    |    |    |
| 65  | 70 | 75 | 80 |
| Pro Tyr Pro Gln Val Ile Leu Pro Gln Phe Gly Gly Tyr Trp Ile Glu |    |    |    |
| 85  | 90 | 95 |    |

Asp Pro Glu Asn Val Gly Thr Pro Thr Ser Leu Gly Ser Ser Ile Cys  
 100 105 110  
 Glu Glu Glu Glu Glu Asp Asn Leu Ser Pro Asn Thr Phe Gly Tyr Lys  
 115 120 125  
 Leu Glu Cys Lys Gly Glu Ala Arg Ala Tyr Arg Arg His Phe Leu Gly  
 130 135 140  
 Lys Asp His Leu Asn Phe Tyr Cys Thr Gly Ser Ser Leu Gly Asn Leu  
 145 150 155 160  
 Ile Leu Ser Val Lys Cys Glu Glu Ala Glu Gly Ile Glu Tyr Leu Arg  
 165 170 175  
 Val Ile Leu Arg Ser Lys Leu Lys Thr Val His Glu Arg Ile Pro Leu  
 180 185 190  
 Ala Gly Leu Ser Lys Leu Pro Ser Val Pro Gln Ile Ala Lys Ala Phe  
 195 200 205  
 Cys Asp Asp Ala Val Gly Leu Arg Phe Asn Pro Val Leu Tyr Pro Lys  
 210 215 220  
 Ala Ser Gln Met Ile Val Ser Tyr Asp Glu His Glu Val Asn Asn Thr  
 225 230 235 240  
 Phe Lys Phe Gly Val Ile Tyr Gln Lys Ala Arg Gln Thr Leu Glu Glu  
 245 250 255  
 Glu Leu Phe Gly Asn Asn Glu Glu Ser Leu Ala Phe Lys Glu Phe Leu  
 260 265 270  
 Asp Leu Leu Gly Asp Thr Ile Thr Leu Gln Asp Phe Lys Gly Phe Arg  
 275 280 285  
 Gly Gly Leu Asp Val Thr His Gly Gln Thr Gly Val Glu Ser Val Tyr  
 290 295 300  
 Thr Thr Phe Arg Asp Arg Glu Ile Met Phe His Val Ser Thr Lys Leu  
 305 310 315 320  
 Pro Phe Thr Asp Gly Asp Ala Gln Gln Leu Gln Arg Lys Arg His Ile

|   |     |     |
|---|-----|-----|
| 325   | 330 | 335 |
| Gly Asn Asp Ile Val Ala Ile Ile Phe Gln Glu Glu Asn Thr Pro Phe |     |     |
| 340   | 345 | 350 |
| Val Pro Asp Met Ile Ala Ser Asn Phe Leu His Ala Tyr Ile Val Val |     |     |
| 355   | 360 | 365 |
| Gln Val Glu Thr Pro Gly Thr Glu Thr Pro Ser Tyr Lys Val Ser Val |     |     |
| 370   | 375 | 380 |
| Thr Ala Arg Glu Asp Val Pro Thr Phe Gly Pro Pro Leu Pro Ser Pro |     |     |
| 385   | 390 | 395 |
| Pro Val Phe Gln Lys Gly Pro Glu Phe Arg Glu Phe Leu Leu Thr Lys |     |     |
| 405   | 410 | 415 |
| Leu Thr Asn Ala Glu Asn Ala Cys Cys Lys Ser Asp Lys Phe Ala Lys |     |     |
| 420   | 425 | 430 |
| Leu Glu Asp Arg Thr Arg Ala Ala Leu Leu Asp Asn Leu His Asp Glu |     |     |
| 435   | 440 | 445 |
| Leu His Ala His Thr Gln Ala Met Leu Gly Leu Gly Pro Glu Glu Asp |     |     |
| 450   | 455 | 460 |
| Lys Phe Glu Asn Gly Gly His Gly Gly Phe Leu Glu Ser Phe Lys Arg |     |     |
| 465   | 470 | 475 |
| Ala Ile Arg Val Arg Ser His Ser Met Glu Thr Met Val Gly Gly Gln |     |     |
| 485   | 490 | 495 |
| Lys Lys Ser His Ser Gly Gly Ile Pro Gly Ser Leu Ser Gly Gly Ile |     |     |
| 500   | 505 | 510 |
| Ser His Asn Ser Met Glu Val Thr Lys Thr Thr Phe Ser Pro Pro Val |     |     |
| 515   | 520 | 525 |
| Val Ala Ala Thr Val Lys Asn Gln Ser Arg Ser Pro Ile Lys Arg Arg |     |     |
| 530   | 535 | 540 |
| Ser Gly Leu Phe Pro Arg Leu His Thr Gly Ser Glu Gly Gln Gly Asp |     |     |
| 545   | 550 | 555 |
|   |     | 560 |



Ser Arg Ala Arg Cys Asp Ser Thr Ser Ser Thr Pro Lys Thr Pro Asp

565

570

575

Gly Gly His Ser Ser Gln Glu Ile Lys Ser Glu Thr Ser Ser Asn Pro

580

585

590

Ser Ser Pro Glu Ile Cys Pro Asn Lys Glu Lys Pro Phe Met Lys Leu

595

600

605

Lys Glu Asn Gly Arg Ala Ile Ser Arg Ser Ser Ser Ser Thr Ser Ser

610

615

620

Val Ser Ser Thr Ala Gly Glu Gly Glu Ala Met Glu Glu Gly Asp Ser

625

630

635

640

Gly Gly Ser Gln Pro Ser Thr Thr Ser Pro Phe Lys Gln Glu Val Phe

645

650

655

Val Tyr Ser Pro Ser Pro Ser Ser Glu Ser Pro Ser Leu Gly Ala Ala

660

665

670

Ala Thr Pro Ile Ile Met Ser Arg Ser Pro Thr Asp Ala Lys Ser Arg

675

680

685

Asn Ser Pro Arg Ser Asn Leu Lys Phe Arg Phe Asp Lys Leu Ser His

690

695

700

Ala Ser Ser Gly Ala Gly His

705

710

<210> 2405

<211> 165

<212> PRT

<213> Homo sapiens

<400> 2405

Met Glu His Met Glu Phe Arg Arg Lys Pro Thr Lys Thr Pro Ala Cys

1                      5                      10                      15  
Gln Thr His Pro Val Pro Glu Arg Gly Val Pro Leu Ser Phe Asn Glu  
                    20                      25                      30  
Leu Pro Val Ile Thr Ala Met Pro Ser Pro Arg Trp Gly Gly Val Leu  
                    35                      40                      45  
Gly Cys Phe Ser Gln Arg Pro Leu Phe Pro Ala Ala Ile Ser Phe Thr  
                    50                      55                      60  
Trp Thr Thr Leu Leu Ala His Val Pro Leu Ala Ser Thr Gly Gly His  
65                      70                      75                      80  
Arg Pro Glu Pro Trp Val Gln Gly Cys Pro Ser Leu Leu Pro Ser Pro  
                    85                      90                      95  
Pro Leu Lys Ala Gln Ser Cys Trp Val Gly Cys Leu Gly Leu Pro Ser  
                    100                      105                      110  
Phe Pro Trp Lys Pro Val Ala Thr Leu Val His Gly Thr Leu Asp Lys  
                    115                      120                      125  
Ser Ala Pro Arg Gly Gln Thr Cys Ala Pro Ile Leu Ala Cys Ile Leu  
                    130                      135                      140  
Arg Thr Pro His Ala Ala Gly Leu Cys Ala Trp Gly Gly Val Ala Ser  
145                      150                      155                      160  
Leu Ser Trp Ser Val  
                    165

&lt;210&gt; 2406

&lt;211&gt; 120

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2406

Met Ala His Gly Ser Thr Gln Ala Phe Leu Ser Pro Trp Ser Ser Gln  
 1 5 10 15  
 Leu Leu Thr Ser Thr Thr Cys Arg Ile Arg Gly His Arg Ser Arg Gln  
 20 25 30  
 Arg Glu Gly Val Thr Arg Gly Gln Met Val Gln Gly Arg Arg Asp Ser  
 35 40 45  
 Arg Leu His Ala Gly Gln Arg Asn Ser Lys Gly Arg Arg Ile Ala Glu  
 50 55 60  
 Ala Gly Gly Lys Ala Ala Arg Ala Arg Gly Thr Gln Ser Tyr Cys Thr  
 65 70 75 80  
 Pro Lys Arg Gln Pro Val Leu Glu Arg Ala Ala Ala Lys Pro Ile Tyr  
 85 90 95  
 Cys Ser Phe Tyr Tyr Ser Val Leu Pro Gly Leu Arg Pro Gly Lys Leu  
 100 105 110  
 Phe Gln Ala Glu Ile Thr Ala His  
 115 120

&lt;210&gt; 2407

&lt;211&gt; 106

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2407

Met Gly Glu Cys Tyr Pro Cys Gln Val Val Gly Ala Ser Trp Leu Gln  
 1 5 10 15  
 Ser Trp Val Gly Asp Leu Gly Lys Met Leu Trp Lys Ala Val Ser Gly  
 20 25 30  
 Trp Cys Gln Leu Leu Val Val Gln Trp Glu Ile Trp Ser Gly Met Gly

35                      40                      45  
 Trp Ser Glu Gly Gly Arg Gly Ile Trp Cys Gly Val Asp Gln Arg Asn  
 50                      55                      60  
 Phe Gly Lys Ala Trp Lys His Ser Tyr Val Cys Glu Thr His Leu Cys  
 65                      70                      75                      80  
 Gln Gly Lys Asp Ser Lys Leu Lys Phe Phe Ser Cys Leu Leu Val Thr  
 85                      90                      95  
 Arg Thr Trp Leu Trp Ser Val Thr Leu Ala  
 100                      105

<210> 2408

<211> 109

<212> PRT

<213> Homo sapiens

<400> 2408

Met Pro Phe Pro Pro Arg Pro Ala Pro Arg Pro Pro Ser Arg Thr Ala  
 1                      5                      10                      15  
 Ala Leu Gly Glu Asp Glu Asp Gly Arg Lys Val Arg Ala Gly Leu Ser  
 20                      25                      30  
 Thr Gly Lys Arg Glu Gln Asp Gly Asp Phe Gly Arg Gln Trp Gly Glu  
 35                      40                      45  
 Leu Met Gly Arg Val Gln Ala Pro Phe Leu Gln Pro Leu Ala Thr Trp  
 50                      55                      60  
 Ser Ser Asp Gly Gly Ala Val Leu Ser Leu Thr Pro Glu Thr Leu Ile  
 65                      70                      75                      80  
 Pro Ala Val Leu Arg Gly Val Asp Asn Lys Phe His Phe Pro Ser Pro  
 85                      90                      95

Val Leu Phe Trp Glu Val Gly Thr Pro Gly Phe Gly Gly

100

105

<210> 2409

<211> 132

<212> PRT

<213> Homo sapiens

<400> 2409

Met Ile Ser Ile Thr Glu Trp Gln Lys Ile Gly Val Gly Ile Thr Gly

1

5

10

15

Phe Gly Ile Phe Phe Ile Leu Phe Gly Thr Leu Leu Tyr Phe Asp Ser

20

25

30

Val Leu Leu Ala Phe Gly Asn Leu Leu Phe Leu Thr Gly Leu Ser Leu

35

40

45

Ile Ile Gly Leu Arg Lys Thr Phe Trp Phe Phe Phe Gln Arg His Lys

50

55

60

Leu Lys Gly Thr Ser Phe Leu Leu Gly Gly Val Val Ile Val Leu Leu

65

70

75

80

Arg Trp Pro Leu Leu Gly Met Phe Leu Glu Thr Tyr Gly Phe Phe Ser

85

90

95

Leu Phe Lys Gly Phe Phe Pro Val Ala Phe Gly Phe Leu Gly Asn Val

100

105

110

Cys Asn Ile Pro Phe Leu Gly Ala Leu Phe Arg Arg Leu Gln Gly Thr

115

120

125

Ser Ser Met Val

130

&lt;210&gt; 2410

&lt;211&gt; 180

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2410

Met Ala Glu Ala Ser Ser Ala Asn Leu Gly Ser Gly Cys Glu Glu Lys

1 5 10 15

Arg His Glu Gly Ser Ser Ser Glu Ser Val Pro Pro Gly Thr Thr Ile

20 25 30

Ser Arg Val Lys Leu Leu Asp Thr Met Val Asp Thr Phe Leu Gln Lys

35 40 45

Leu Val Ala Ala Gly Ser Tyr Gln Arg Phe Thr Asp Cys Tyr Lys Cys

50 55 60

Phe Tyr Gln Leu Gln Pro Ala Met Thr Gln Arg Ile Tyr Asp Lys Phe

65 70 75 80

Ile Ala Gln Leu Gln Thr Ser Ile Arg Glu Glu Ile Ser Asp Ile Lys

85 90 95

Glu Glu Gly Asn Leu Glu Ala Val Leu Asn Ala Leu Asp Lys Ile Val

100 105 110

Glu Glu Gly Lys Val Arg Lys Glu Pro Ala Cys Asn Gly Thr Pro Cys

115 120 125

Gly Ala Met Cys Arg Asn Arg Arg Pro Arg Thr Ser Ser Trp Gln Met

130 135 140

Pro Ser Trp Gln Gly Gly Gly Arg Trp Arg Ser Cys Ser Tyr Arg Ser

145 150 155 160

Arg Pro Ser Ser Arg Pro Gly Arg Leu Tyr Thr Glu Asn Arg Gly Ser

165 170 175

Trp Leu Leu Cys

180

<210> 2411

<211> 409

<212> PRT

<213> Homo sapiens

<400> 2411

Met Gly Ser Gln Ala Ala Ala Glu Trp Arg Asn Trp Ala Ser Trp Glu

1 5 10 15

Val Ser Ser Ser Leu Ser Gly Cys Ser Met Gly Cys Phe Lys Asp Asp

20 25 30

Arg Ile Val Phe Trp Thr Trp Met Phe Ser Thr Tyr Phe Met Glu Lys

35 40 45

Trp Ala Pro Arg Gln Asp Asp Met Leu Phe Tyr Val Arg Arg Lys Leu

50 55 60

Ala Tyr Ser Gly Ser Glu Ser Gly Ala Asp Gly Arg Lys Ala Ala Glu

65 70 75 80

Pro Glu Val Glu Val Glu Val Tyr Arg Arg Asp Ser Lys Lys Leu Pro

85 90 95

Gly Leu Gly Asp Pro Asp Ile Asp Trp Glu Glu Ser Val Cys Leu Asn

100 105 110

Leu Ile Leu Gln Lys Leu Asp Tyr Met Val Thr Cys Ala Val Cys Thr

115 120 125

Arg Ala Asp Gly Gly Asp Ile His Ile His Lys Lys Lys Ser Gln Gln

130 135 140

Val Phe Ala Ser Pro Ser Lys His Pro Met Asp Ser Lys Gly Glu Glu

145                      150                      155                      160  
Ser Lys Ile Ser Tyr Pro Asn Ile Phe Phe Met Ile Asp Ser Phe Glu  
                         165                      170                      175  
Glu Val Phe Ser Asp Met Thr Val Gly Glu Gly Glu Met Val Cys Val  
                         180                      185                      190  
Glu Leu Val Ala Ser Asp Lys Thr Asn Thr Phe Gln Gly Val Ile Phe  
                         195                      200                      205  
Gln Gly Ser Ile Arg Tyr Glu Ala Leu Lys Lys Val Tyr Asp Asn Arg  
                         210                      215                      220  
Val Ser Val Ala Ala Arg Met Ala Gln Lys Met Ser Phe Gly Phe Tyr  
225                      230                      235                      240  
Lys Tyr Ser Asn Met Glu Phe Val Arg Met Lys Gly Pro Gln Gly Lys  
                         245                      250                      255  
Gly His Ala Glu Met Ala Val Ser Arg Val Ser Thr Gly Asp Thr Ser  
                         260                      265                      270  
Pro Cys Gly Thr Glu Glu Asp Ser Ser Pro Ala Ser Pro Met His Glu  
                         275                      280                      285  
Arg Val Thr Ser Phe Ser Thr Pro Pro Thr Pro Glu Arg Asn Asn Arg  
                         290                      295                      300  
Pro Ala Phe Phe Ser Pro Ser Leu Lys Arg Lys Val Pro Arg Asn Arg  
305                      310                      315                      320  
Ile Ala Glu Met Lys Lys Ser His Ser Ala Asn Asp Ser Glu Glu Phe  
                         325                      330                      335  
Phe Arg Glu Asp Asp Gly Gly Ala Asp Leu His Asn Ala Thr Asn Leu  
                         340                      345                      350  
Arg Ser Arg Ser Leu Ser Gly Thr Gly Arg Ser Leu Val Gly Ser Trp  
                         355                      360                      365  
Leu Lys Leu Asn Arg Ala Asp Gly Asn Phe Leu Leu Tyr Ala His Leu  
                         370                      375                      380



Thr Tyr Val Thr Leu Pro Leu His Arg Ile Leu Thr Asp Ile Leu Glu  
385 390 395 400  
Val Arg Gln Lys Pro Ile Leu Met Thr  
405

<210> 2412

<211> 189

<212> PRT

<213> Homo sapiens

<400> 2412

Met Trp Glu Leu Asp Lys Ala Ser Tyr Glu Ile Lys Lys Val Trp Tyr  
1 5 10 15  
Gly Arg Thr Ile Ile Arg Ser Ala Tyr Lys Leu Phe Tyr Glu Ala Ala  
20 25 30  
Gln Glu Leu Leu Asp Gly Asn Leu Ser Val Val Asp Asp Ile Pro Glu  
35 40 45  
Phe Lys Asp Leu Asn Glu Lys Ser Arg Gln Ala Lys Leu Glu Glu Leu  
50 55 60  
Val Trp Ala Ile Gly Lys Leu Thr Asp Ile Ala Arg His Val Arg Ala  
65 70 75 80  
Lys Arg Asp Gly Cys Gly Ala Leu Glu Leu Glu Gly Val Glu Val Cys  
85 90 95  
Val Gln Leu Asp Asp Lys Lys Asn Ile His Asp Leu Ile Pro Lys Gln  
100 105 110  
Pro Leu Glu Val His Glu Thr Val Ala Glu Cys Met Ile Leu Ala Asn  
115 120 125  
His Trp Val Ala Lys Lys Ile Trp Glu Ser Phe Pro His Gln Ala Leu

|   |     |     |
|---|-----|-----|
| 130   | 135 | 140 |
| Leu Arg Gln His Pro Pro Pro His Gln Glu Phe Phe Ser Glu Leu Arg |     |     |
| 145   | 150 | 155 |
| Glu Cys Ala Lys Ala Lys Gly Phe Phe Ile Asp Thr Arg Tyr Ser Ser |     |     |
| 165   | 170 | 175 |
| Phe Glu Gly Ala Glu Glu Trp Ser Gly Met Leu Tyr Ile             |     |     |
| 180   | 185 |     |

&lt;210&gt; 2413

&lt;211&gt; 178

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2413

|   |     |     |
|---|-----|-----|
| Met Thr Lys Arg Gly Gln Gly Ile Ala Trp Ala Val Ala Ser Glu Gly |     |     |
| 1   | 5   | 10  |
| Ala Ser Pro Lys Pro Trp Trp Leu Ser Tyr Gly Val Val Pro Val Gly |     |     |
| 20  | 25  | 30  |
| Val Gln Lys Thr Arg Val Glu Leu Trp Glu Pro Leu Pro Gln Phe Gln |     |     |
| 35  | 40  | 45  |
| Arg Met Tyr Gly Asn Thr Trp Met Ser Arg Gln Lys Ser Ala Ala Trp |     |     |
| 50  | 55  | 60  |
| Glu Glu Pro Thr Cys Arg Thr Ser Thr Met Ala Arg His Arg Gly Asn |     |     |
| 65  | 70  | 75  |
| Val Gly Leu Glu Ser Pro His Arg Val Pro Thr Gly Ala Leu Pro Ser |     |     |
| 85  | 90  | 95  |
| Gly Ala Val Lys Arg Gly Pro Leu Ser Ser Arg Pro Leu Lys Cys Arg |     |     |
| 100   | 105 | 110 |

Ser Thr Asp Ser Leu His Cys Ala Pro Gly Asn Ala Gly Thr Gln Gly  
 115 120 125  
 Gln Pro Met Lys Ala Ala Ala Gly Ala Ala Pro Cys Arg Ala Thr Gly  
 130 135 140  
 Val Glu Leu Pro Asn Ser Leu Lys Asp His Pro Phe Leu Val Ser Ser  
 145 150 155 160  
 Cys Leu Gly Cys Glu Thr Trp Ser Gln Gly Arg Ser Phe Gln Ser Phe  
 165 170 175  
 Asn Ile

<210> 2414

<211> 443

<212> PRT

<213> Homo sapiens

<400> 2414

Met Val Asp Thr Val Leu Tyr Asp Asn Thr Gln Leu Gln Leu Lys Ala  
 1 5 10 15  
 Glu Ser Pro Trp Glu Ala Leu Asp Trp Gly Gln Lys Leu Trp Glu Val  
 20 25 30  
 Val His Ala Ala Val Pro Gly Tyr Met Gly Arg Gln Asn Glu Leu Thr  
 35 40 45  
 Ile Ser Pro Gly Leu Gly His His Asp Asp Tyr Thr Gln Asn His Ser  
 50 55 60  
 Phe Gln Lys Lys Thr Ser Gly Leu Leu Pro Pro Ser Pro Val Leu Asp  
 65 70 75 80  
 Ser Ser Lys Gln Tyr Gln Asn Ile Leu Lys Ser Gly Thr Leu Tyr Arg

|   |     |     |     |
|---|-----|-----|-----|
|   | 85  | 90  | 95  |
| Leu Thr Val Gln Asn Asn Trp Lys Ala Phe Thr Phe Val Leu Ser Arg |     |     |     |
| 100   | 105 | 110 |     |
| Ala Tyr Leu Met Ala Phe Gln Pro Gly Lys Leu Asp Glu Asp Pro Leu |     |     |     |
| 115   | 120 | 125 |     |
| Leu Ser Tyr Asn Val Asp Val Cys Leu Ala Val Gln Met Asp Asn Leu |     |     |     |
| 130   | 135 | 140 |     |
| Asp Gly Cys Asp Ser Cys Phe Gln Val Ile Phe Pro Gln Asp Val Leu |     |     |     |
| 145   | 150 | 155 | 160 |
| Arg Leu Arg Ala Glu Thr Arg Gln Arg Ala Gln Glu Trp Met Glu Ala |     |     |     |
| 165   | 170 | 175 |     |
| Leu Lys Ile Ala Ala Asn Val Ala Arg Ser Ser Glu Gln Asn Leu Gln |     |     |     |
| 180   | 185 | 190 |     |
| Val Thr Leu Arg Asn Lys Pro Lys Asp Gln Met Gly Gly His Glu Leu |     |     |     |
| 195   | 200 | 205 |     |
| Arg Lys Asn Lys Arg Gln Ser Val Thr Thr Ser Phe Leu Ser Ile Leu |     |     |     |
| 210   | 215 | 220 |     |
| Thr Thr Leu Ser Leu Glu Arg Gly Leu Thr Ala Gln Ser Phe Lys Cys |     |     |     |
| 225   | 230 | 235 | 240 |
| Ala Gly Cys Gln Arg Ser Ile Gly Leu Ser Asn Gly Lys Ala Lys Val |     |     |     |
| 245   | 250 | 255 |     |
| Cys Asn Tyr Ser Gly Trp Tyr Tyr Cys Ser Ser Cys His Val Asp Asp |     |     |     |
| 260   | 265 | 270 |     |
| Ser Phe Leu Ile Pro Ala Arg Ile Val His Asn Trp Asp Thr Ser Lys |     |     |     |
| 275   | 280 | 285 |     |
| Tyr Lys Val Ser Lys Gln Ala Lys Glu Phe Leu Glu Tyr Val Tyr Glu |     |     |     |
| 290   | 295 | 300 |     |
| Glu Pro Leu Ile Asp Ile Gln Gln Glu Asn Ala Met Leu Tyr His His |     |     |     |
| 305   | 310 | 315 | 320 |

Ala Glu Pro Leu Ala Ala Val Leu Arg Leu Arg Gln Arg Leu Lys Ser  
325 330 335  
Leu Arg Ala Tyr Leu Phe Ser Cys Arg Ala Ala Val Ala Glu Asp Leu  
340 345 350  
Arg Arg Arg Ile Phe Pro Arg Glu Tyr Leu Leu Gln Gln Ile His Leu  
355 360 365  
Tyr Ser Leu Ala Asp Leu Gln Gln Val Ile Glu Gly Lys Leu Ala Pro  
370 375 380  
Phe Leu Gly Lys Val Ile Lys Phe Ala Thr Ser His Val Tyr Ser Cys  
385 390 395 400  
Ser Leu Cys Ser Gln Lys Gly Phe Ile Cys Glu Ile Cys Asn Asn Gly  
405 410 415  
Glu Ile Leu Tyr Pro Phe Glu Asp Ile Ser Thr Ser Arg Phe Gly Asp  
420 425 430  
Pro Tyr Ala Asp Leu Leu Gln Gly Tyr Val Ala  
435 440

&lt;210&gt; 2415

&lt;211&gt; 485

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2415

Met Tyr Thr Ser His Glu Asp Ile Gly Tyr Asp Phe Glu Asp Gly Pro  
1 5 10 15  
Lys Asp Lys Lys Thr Leu Lys Pro His Pro Asn Ile Asp Gly Gly Trp  
20 25 30  
Ala Trp Met Met Val Leu Ser Ser Phe Phe Val His Ile Leu Ile Met

|   |     |     |
|---|-----|-----|
| 35  | 40  | 45  |
| Gly Ser Gln Met Ala Leu Gly Val Leu Asn Val Glu Trp Leu Glu Glu |     |     |
| 50  | 55  | 60  |
| Phe His Gln Ser Arg Gly Leu Thr Ala Trp Val Ser Ser Leu Ser Met |     |     |
| 65  | 70  | 75  |
| Gly Ile Thr Leu Ile Val Gly Pro Phe Ile Gly Leu Phe Ile Asn Thr |     |     |
| 85  | 90  | 95  |
| Cys Gly Cys Arg Gln Thr Ala Ile Ile Gly Gly Leu Val Asn Ser Leu |     |     |
| 100   | 105 | 110 |
| Gly Trp Val Leu Ser Ala Tyr Ala Ala Asn Val His Tyr Leu Phe Ile |     |     |
| 115   | 120 | 125 |
| Thr Phe Gly Val Ala Ala Gly Leu Gly Ser Gly Met Ala Tyr Leu Pro |     |     |
| 130   | 135 | 140 |
| Ala Val Val Met Val Gly Arg Tyr Phe Gln Lys Arg Arg Ala Leu Ala |     |     |
| 145   | 150 | 155 |
| Gln Gly Leu Ser Thr Thr Gly Thr Gly Phe Gly Thr Phe Leu Met Thr |     |     |
| 165   | 170 | 175 |
| Val Leu Leu Lys Tyr Leu Cys Ala Glu Tyr Gly Trp Arg Asn Ala Met |     |     |
| 180   | 185 | 190 |
| Leu Ile Gln Gly Ala Val Ser Leu Asn Leu Cys Val Cys Gly Ala Leu |     |     |
| 195   | 200 | 205 |
| Met Arg Pro Leu Ser Pro Gly Lys Asn Pro Asn Asp Pro Gly Glu Lys |     |     |
| 210   | 215 | 220 |
| Asp Val Arg Gly Leu Pro Ala His Ser Thr Glu Ser Val Lys Ser Thr |     |     |
| 225   | 230 | 235 |
| Gly Gln Gln Gly Arg Thr Glu Glu Lys Asp Gly Gly Leu Gly Asn Glu |     |     |
| 245   | 250 | 255 |
| Glu Thr Leu Cys Asp Leu Gln Ala Gln Glu Cys Pro Asp Gln Ala Gly |     |     |
| 260   | 265 | 270 |

His Arg Lys Asn Met Cys Ala Leu Arg Ile Leu Lys Thr Val Ser Trp  
275 280 285

Leu Thr Met Arg Val Arg Lys Gly Phe Glu Asp Trp Tyr Ser Gly Tyr  
290 295 300

Phe Gly Thr Ala Ser Leu Phe Thr Asn Arg Met Phe Val Ala Phe Ile  
305 310 315 320

Phe Trp Ala Leu Phe Ala Tyr Ser Ser Phe Val Ile Pro Phe Ile His  
325 330 335

Leu Pro Glu Ile Val Asn Leu Tyr Asn Leu Ser Glu Gln Asn Asp Val  
340 345 350

Phe Pro Leu Thr Ser Ile Ile Ala Ile Val His Ile Phe Gly Lys Val  
355 360 365

Ile Leu Gly Val Ile Ala Asp Leu Pro Cys Ile Ser Val Trp Asn Val  
370 375 380

Phe Leu Leu Ala Asn Phe Thr Leu Val Leu Ser Ile Phe Ile Leu Pro  
385 390 395 400

Leu Met His Thr Tyr Ala Gly Leu Ala Val Ile Cys Ala Leu Ile Gly  
405 410 415

Phe Ser Ser Gly Tyr Phe Ser Leu Met Pro Val Val Thr Glu Asp Leu  
420 425 430

Val Gly Ile Glu His Leu Ala Asn Ala Tyr Gly Ile Ile Ile Cys Ala  
435 440 445

Asn Gly Ile Ser Ala Leu Leu Gly Pro Pro Phe Ala Gly Lys Leu Ser  
450 455 460

Glu Val Leu Arg Ala Gln Ser Ala Cys Thr Tyr Gly Ala Leu Cys Tyr  
465 470 475 480

Lys Val Pro Asp Lys  
485

&lt;210&gt; 2416

&lt;211&gt; 163

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2416

Met Lys Ser Arg Ile Pro Val Val Leu Leu Ala Cys Gly Ser Phe Asn

1 5 10 15

Pro Ile Thr Asn Met His Leu Arg Met Phe Glu Val Ala Arg Asp His

20 25 30

Leu His Gln Thr Ala Val Pro Glu Leu Lys Leu Leu Cys Gly Ala Asp

35 40 45

Val Leu Lys Thr Phe Gln Thr Pro Asn Leu Trp Lys Asp Ala His Ile

50 55 60

Gln Glu Ile Val Glu Lys Phe Gly Leu Val Cys Val Gly Arg Val Gly

65 70 75 80

His Asp Pro Lys Gly Tyr Ile Ala Glu Ser Pro Ile Leu Arg Met His

85 90 95

Gln His Asn Ile His Leu Ala Lys Glu Pro Val Gln Asn Glu Ile Ser

100 105 110

Ala Thr Tyr Ile Arg Arg Ala Leu Gly Gln Gly Gln Ser Val Lys Tyr

115 120 125

Leu Ile Pro Asp Ala Val Ile Thr Tyr Ile Lys Asp His Gly Leu Tyr

130 135 140

Thr Lys Gly Ser Thr Trp Lys Gly Lys Ser Thr Gln Ser Thr Glu Gly

145 150 155 160

Lys Thr Ser



&lt;210&gt; 2417

&lt;211&gt; 308

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2417

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Met Gly Asn Tyr Gln Glu Tyr Leu Lys Thr Leu Ala Ser Pro Leu Arg
  1           5           10           15
Glu Ile Asp Pro Asp Gln Pro Lys Arg Leu His Thr Phe Gly Asn Pro
          20           25           30
Phe Lys Gln Asp Lys Lys Gly Met Met Ile Asp Glu Ala Asp Glu Phe
          35           40           45
Val Ala Gly Pro Gln Asn Lys Val Lys Arg Pro Gly Glu Pro Asn Ser
          50           55           60
Pro Met Ser Ser Lys Arg Arg Arg Ser Met Ser Leu Leu Leu Arg Lys
          65           70           75           80
Pro Gln Thr Pro Pro Thr Val Thr Asn His Val Gly Gly Lys Gly Pro
          85           90           95
Pro Ser Ala Ser Trp Phe Pro Ser Tyr Pro Asn Leu Ile Lys Pro Thr
          100          105          110
Leu Val His Thr Asp Ala Thr Ile Ile His Asp Gly His Glu Glu Lys
          115          120          125
Met Glu Asn Gly Gln Ile Thr Pro Asp Gly Phe Leu Ser Lys Ser Ala
          130          135          140
Pro Ser Glu Leu Ile Asn Met Thr Gly Asp Leu Met Pro Pro Asn Gln
          145          150          155          160
Val Asp Ser Leu Ser Asp Asp Phe Thr Ser Leu Ser Lys Asp Gly Leu

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165 170 175  
Ile Gln Lys Pro Gly Ser Asn Ala Phe Val Gly Gly Ala Lys Asn Cys  
180 185 190  
Ser Leu Ser Val Asp Asp Gln Lys Asp Pro Val Ala Ser Thr Leu Gly  
195 200 205  
Ala Met Pro Asn Thr Leu Gln Ile Thr Pro Ala Met Ala Gln Gly Ile  
210 215 220  
Asn Ala Asp Ile Lys His Gln Leu Met Lys Glu Val Arg Lys Phe Gly  
225 230 235 240  
Arg Lys Tyr Glu Arg Ile Phe Ile Leu Leu Glu Glu Val Gln Gly Pro  
245 250 255  
Leu Glu Met Lys Lys Gln Phe Val Glu Phe Thr Ile Lys Glu Ala Ala  
260 265 270  
Arg Phe Lys Arg Arg Val Leu Ile Gln Tyr Leu Glu Lys Val Leu Glu  
275 280 285  
Lys Ile Asn Ser His His Leu His Asn Asn Ile Ser His Ile Asn Ser  
290 295 300  
Arg Ser Ser Cys  
305

&lt;210&gt; 2418

&lt;211&gt; 529

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2418

Met Glu Leu Met Ile Gln Glu Lys Ser Phe Gly Asn Ser Leu Leu Leu

1

5

10

15

|   |     |     |     |
|---|-----|-----|-----|
| Asn Ser Ala Met Gln Pro Asp Leu Thr Val Ser Arg Thr Tyr Ser Gly |     |     |     |
| 20  | 25  | 30  |     |
| Pro Ile Cys Leu Gln Asp Pro Leu Asp Lys Glu Leu Met Thr Glu Ser |     |     |     |
| 35  | 40  | 45  |     |
| Ser Leu Phe Asn Pro Leu Ser Asp Ile Lys Val Lys Val Gln Ser Ser |     |     |     |
| 50  | 55  | 60  |     |
| Phe Met Val Ser Leu Gly Val Ser Glu Arg Ala Glu Tyr His Gly Lys |     |     |     |
| 65  | 70  | 75  | 80  |
| Asn His Ser Arg Thr Phe Pro His Gly Asn Asn His Ser Phe Ser Thr |     |     |     |
| 85  | 90  | 95  |     |
| Met His Pro Arg Asn Lys Met Pro Tyr Ile Gln Asn Leu Ser Ser Leu |     |     |     |
| 100   | 105 | 110 |     |
| Pro Thr Arg Thr Glu Leu Arg Thr Thr Gly Val Phe Gly His Leu Gly |     |     |     |
| 115   | 120 | 125 |     |
| Gly Arg Leu Val Met Pro Asn Lys Gly Val Ser Leu Leu Ile Pro His |     |     |     |
| 130   | 135 | 140 |     |
| Gly Ala Ile Pro Glu Glu Asn Ser Trp Glu Ile Tyr Met Ser Ile Asn |     |     |     |
| 145   | 150 | 155 | 160 |
| Gln Gly Glu Pro Ser Leu Gln Ser Asp Gly Ser Glu Val Leu Leu Ser |     |     |     |
| 165   | 170 | 175 |     |
| Pro Glu Val Thr Cys Gly Pro Pro Asp Met Ile Val Thr Thr Pro Phe |     |     |     |
| 180   | 185 | 190 |     |
| Ala Leu Thr Ile Pro His Cys Ala Asp Val Ser Ser Glu His Trp Asn |     |     |     |
| 195   | 200 | 205 |     |
| Ile His Leu Lys Lys Arg Thr Gln Gln Gly Lys Trp Glu Glu Val Met |     |     |     |
| 210   | 215 | 220 |     |
| Ser Val Glu Asp Glu Ser Thr Ser Cys Tyr Cys Leu Leu Asp Pro Phe |     |     |     |
| 225   | 230 | 235 | 240 |
| Ala Cys His Val Leu Leu Asp Ser Phe Gly Thr Tyr Ala Leu Thr Gly |     |     |     |

|   |     |     |
|---|-----|-----|
| 245   | 250 | 255 |
| Glu Pro Ile Thr Asp Cys Ala Val Lys Gln Leu Lys Val Ala Val Phe |     |     |
| 260   | 265 | 270 |
| Gly Cys Met Ser Cys Asn Ser Leu Asp Tyr Asn Leu Arg Val Tyr Cys |     |     |
| 275   | 280 | 285 |
| Val Asp Asn Thr Pro Cys Ala Phe Gln Glu Val Val Ser Asp Glu Arg |     |     |
| 290   | 295 | 300 |
| His Gln Gly Gly Gln Leu Leu Glu Glu Pro Lys Leu Leu His Phe Lys |     |     |
| 305   | 310 | 315 |
| Gly Asn Thr Phe Ser Leu Gln Ile Ser Val Leu Asp Ile Pro Pro Phe |     |     |
| 325   | 330 | 335 |
| Leu Trp Arg Ile Lys Pro Phe Thr Ala Cys Gln Glu Val Pro Phe Ser |     |     |
| 340   | 345 | 350 |
| Arg Val Trp Cys Ser Asn Arg Gln Pro Leu His Cys Ala Phe Ser Leu |     |     |
| 355   | 360 | 365 |
| Glu Arg Tyr Thr Pro Thr Thr Thr Gln Leu Ser Cys Lys Ile Cys Ile |     |     |
| 370   | 375 | 380 |
| Arg Gln Leu Lys Gly His Glu Gln Ile Leu Gln Val Gln Thr Ser Ile |     |     |
| 385   | 390 | 395 |
| Leu Glu Ser Glu Arg Glu Thr Ile Thr Phe Phe Ala Gln Glu Asp Ser |     |     |
| 405   | 410 | 415 |
| Thr Phe Pro Ala Gln Thr Gly Pro Lys Ala Phe Lys Ile Pro Tyr Ser |     |     |
| 420   | 425 | 430 |
| Ile Arg Gln Arg Ile Cys Ala Thr Phe Asp Thr Pro Asn Ala Lys Gly |     |     |
| 435   | 440 | 445 |
| Lys Asp Trp Gln Met Leu Ala Gln Lys Asn Ser Ile Asn Arg Asn Leu |     |     |
| 450   | 455 | 460 |
| Ser Tyr Phe Ala Thr Gln Ser Ser Pro Ser Ala Val Ile Leu Asn Leu |     |     |
| 465   | 470 | 475 |
|   |     | 480 |

Trp Glu Ala Arg His Gln His Asp Gly Asp Leu Asp Ser Leu Ala Cys  
                             485                            490                            495  
 Ala Leu Glu Glu Ile Gly Arg Thr His Thr Lys Leu Ser Asn Ile Ser  
                             500                            505                            510  
 Glu Ser Gln Leu Asp Glu Ala Asp Phe Asn Tyr Ser Arg Gln Asn Gly  
                             515                            520                            525  
 Leu

<210> 2419

<211> 241

<212> PRT

<213> Homo sapiens

<400> 2419

Met Ala Gln Glu Lys Met Glu Leu Asp Leu Glu Pro Asp Thr Ser Tyr  
           1                            5                            10                            15  
 Gly Gly Thr Leu Arg Arg Ser Ser Ser Ala Pro Leu Ile His Gly Leu  
                             20                            25                            30  
 Ser Asp Leu Ser Gln Val Phe Gln Pro Tyr Thr Leu Arg Thr Arg Arg  
                             35                            40                            45  
 Asn Ser Thr Thr Ile Met Ser Arg His Ser Leu Leu Leu Ser Ser Ser  
           50                            55                            60  
 Pro Asn Arg Ile Pro Ser Ser Arg Leu His Gln Ile Lys Arg Glu Glu  
           65                            70                            75                            80  
 Gly Leu Asp Met Val Asn Arg Glu Thr Ala His Glu Arg Glu Met Gln  
                             85                            90                            95  
 Thr Ala Met Gln Ile Ser Gln Ser Trp Asp Glu Ser Leu Ser Leu Ser

出証特 2 0 0 4 - 3 0 5 9 6 6 0

|   |     |     |     |
|---|-----|-----|-----|
| Val Thr Cys Tyr Leu Leu Leu Leu Leu His Lys Glu Ile Leu Gly Cys |     |     |     |
| 20  | 25  | 30  |     |
| Ser Ser Val Cys Gln Leu Cys Thr Gly Arg Gln Ile Asn Cys Arg Asn |     |     |     |
| 35  | 40  | 45  |     |
| Leu Gly Leu Ser Ser Ile Pro Lys Asn Phe Pro Glu Ser Thr Val Phe |     |     |     |
| 50  | 55  | 60  |     |
| Leu Tyr Leu Thr Gly Asn Asn Ile Ser Tyr Ile Asn Glu Ser Glu Leu |     |     |     |
| 65  | 70  | 75  | 80  |
| Thr Gly Leu His Ser Leu Val Ala Leu Tyr Leu Asp Asn Ser Asn Ile |     |     |     |
| 85  | 90  | 95  |     |
| Leu Tyr Val Tyr Pro Lys Ala Phe Val Gln Leu Arg His Leu Tyr Phe |     |     |     |
| 100   | 105 | 110 |     |
| Leu Phe Leu Asn Asn Asn Phe Ile Lys Arg Leu Asp Pro Gly Ile Phe |     |     |     |
| 115   | 120 | 125 |     |
| Lys Gly Leu Leu Asn Leu Arg Asn Leu Tyr Leu Gln Tyr Asn Gln Val |     |     |     |
| 130   | 135 | 140 |     |
| Ser Phe Val Pro Arg Gly Val Phe Asn Asp Leu Val Ser Val Gln Tyr |     |     |     |
| 145   | 150 | 155 | 160 |
| Leu Asn Leu Gln Arg Asn Arg Leu Thr Val Leu Gly Ser Gly Thr Phe |     |     |     |
| 165   | 170 | 175 |     |
| Val Gly Met Val Ala Leu Arg Ile Leu Asp Leu Ser Asn Asn Asn Ile |     |     |     |
| 180   | 185 | 190 |     |
| Leu Arg Ile Ser Glu Ser Gly Phe Gln His Leu Glu Asn Leu Ala Cys |     |     |     |
| 195   | 200 | 205 |     |
| Leu Tyr Leu Gly Ser Asn Asn Leu Thr Lys Val Pro Ser Asn Ala Phe |     |     |     |
| 210   | 215 | 220 |     |
| Glu Val Leu Lys Ser Leu Arg Arg Leu Ser Leu Ser His Asn Pro Ile |     |     |     |
| 225   | 230 | 235 | 240 |
| Glu Ala Ile Gln Pro Phe Ala Phe Lys Gly Leu Ala Asn Leu Glu Tyr |     |     |     |

|   |     |     |
|---|-----|-----|
| 245   | 250 | 255 |
| Leu Leu Leu Lys Asn Ser Arg Ile Arg Asn Val Thr Arg Asp Gly Phe |     |     |
| 260   | 265 | 270 |
| Ser Gly Ile Asn Asn Leu Lys His Leu Ile Leu Ser His Asn Asp Leu |     |     |
| 275   | 280 | 285 |
| Glu Asn Leu Asn Ser Asp Thr Phe Ser Leu Leu Lys Asn Leu Ile Tyr |     |     |
| 290   | 295 | 300 |
| Leu Lys Leu Asp Arg Asn Arg Ile Ile Ser Ile Asp Asn Asp Thr Phe |     |     |
| 305   | 310 | 315 |
| Glu Asn Met Gly Ala Ser Leu Lys Ile Leu Asn Leu Ser Phe Asn Asn |     |     |
| 325   | 330 | 335 |
| Leu Thr Ala Leu His Pro Arg Val Leu Lys Pro Leu Ser Ser Leu Ile |     |     |
| 340   | 345 | 350 |
| His Leu Gln Ala Asn Ser Asn Pro Trp Glu Cys Asn Cys Lys Leu Leu |     |     |
| 355   | 360 | 365 |
| Gly Leu Arg Asp Trp Leu Ala Ser Ser Ala Ile Thr Leu Asn Ile Tyr |     |     |
| 370   | 375 | 380 |
| Cys Gln Asn Pro Pro Ser Met Arg Gly Arg Ala Leu Arg Tyr Ile Asn |     |     |
| 385   | 390 | 395 |
| Ile Thr Asn Cys Val Thr Ser Ser Ile Asn Val Ser Arg Ala Trp Ala |     |     |
| 405   | 410 | 415 |
| Val Val Lys Ser Pro His Ile His His Lys Thr Thr Ala Leu Met Met |     |     |
| 420   | 425 | 430 |
| Ala Trp His Lys Val Thr Thr Asn Gly Ser Pro Leu Glu Asn Thr Glu |     |     |
| 435   | 440 | 445 |
| Thr Glu Asn Ile Thr Phe Trp Glu Arg Ile Pro Thr Ser Pro Ala Gly |     |     |
| 450   | 455 | 460 |
| Arg Phe Phe Gln Glu Asn Ala Phe Gly Asn Pro Leu Glu Thr Thr Ala |     |     |
| 465   | 470 | 475 |
|   |     | 480 |



|     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| Val | Leu | Pro | Val | Gln | Ile | Gln | Leu | Thr | Thr | Ser | Val | Thr | Leu | Asn | Leu |
|     |     |     |     | 485 |     |     |     | 490 |     |     |     |     |     | 495 |     |
| Glu | Lys | Asn | Ser | Ala | Leu | Pro | Asn | Asp | Ala | Ala | Ser | Met | Ser | Gly | Lys |
|     |     |     |     | 500 |     |     |     | 505 |     |     |     |     |     | 510 |     |
| Thr | Ser | Leu | Ile | Cys | Thr | Gln | Glu | Val | Glu | Lys | Leu | Asn | Glu | Ala | Phe |
|     |     |     |     | 515 |     |     |     | 520 |     |     |     |     |     | 525 |     |
| Asp | Ile | Leu | Leu | Ala | Phe | Phe | Ile | Leu | Ala | Cys | Val | Leu | Ile | Ile | Phe |
|     |     |     |     | 530 |     |     |     | 535 |     |     |     |     |     | 540 |     |
| Leu | Ile | Tyr | Lys | Val | Val | Gln | Phe | Lys | Gln | Lys | Leu | Lys | Ala | Ser | Glu |
| 545 |     |     |     |     |     | 550 |     |     |     |     | 555 |     |     |     | 560 |
| Asn | Ser | Arg | Glu | Asn | Arg | Leu | Glu | Tyr | Tyr | Ser | Phe | Tyr | Gln | Ser | Ala |
|     |     |     |     |     |     | 565 |     |     |     |     | 570 |     |     |     | 575 |
| Arg | Tyr | Asn | Val | Thr | Ala | Ser | Ile | Cys | Asn | Thr | Ser | Pro | Asn | Ser | Leu |
|     |     |     |     |     |     | 580 |     |     |     |     | 585 |     |     |     | 590 |
| Glu | Ser | Pro | Gly | Leu | Glu | Gln | Ile | Arg | Leu | His | Lys | Gln | Ile | Val | Pro |
|     |     |     |     | 595 |     |     |     | 600 |     |     |     |     |     | 605 |     |
| Glu | Asn | Glu | Ala | Gln | Ala | Ile | Leu | Phe | Glu | His | Ser | Ala | Leu |     |     |
|     |     |     |     | 610 |     |     |     | 615 |     |     |     |     |     | 620 |     |

&lt;210&gt; 2421

&lt;211&gt; 407

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2421

|     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| Met | Thr | Ser | Gln | Arg | Ser | Pro | Leu | Ala | Pro | Leu | Leu | Leu | Ser | Leu |
| 1   |     |     |     |     | 5   |     |     |     |     | 10  |     |     | 15  |     |
| His | Gly | Val | Ala | Ala | Ser | Leu | Glu | Val | Ser | Glu | Ser | Pro | Gly | Ser |
|     |     |     |     |     |     |     |     |     |     |     |     |     |     | Ile |

|   |     |     |
|---|-----|-----|
| 20  | 25  | 30  |
| Gln Val Ala Arg Gly Gln Thr Ala Val Leu Pro Cys Thr Phe Thr Thr |     |     |
| 35  | 40  | 45  |
| Ser Ala Ala Leu Ile Asn Leu Asn Val Ile Trp Met Val Thr Pro Leu |     |     |
| 50  | 55  | 60  |
| Ser Asn Ala Asn Gln Pro Glu Gln Val Ile Leu Tyr Gln Gly Gly Gln |     |     |
| 65  | 70  | 75  |
| Met Phe Asp Gly Ala Pro Arg Phe His Gly Arg Val Gly Phe Thr Gly |     |     |
| 85  | 90  | 95  |
| Thr Met Pro Ala Thr Asn Val Ser Ile Tyr Ile Asn Asn Thr Gln Leu |     |     |
| 100   | 105 | 110 |
| Ser Asp Thr Gly Thr Tyr Gln Cys Leu Val Asn Asn Leu Pro Asp Ile |     |     |
| 115   | 120 | 125 |
| Gly Gly Arg Asn Ile Gly Val Thr Gly Leu Thr Val Leu Val Pro Pro |     |     |
| 130   | 135 | 140 |
| Ser Ala Pro His Cys Gln Ile Gln Gly Ser Gln Asp Ile Gly Ser Asp |     |     |
| 145   | 150 | 155 |
| Val Ile Leu Leu Cys Ser Ser Glu Glu Gly Ile Pro Arg Pro Thr Tyr |     |     |
| 165   | 170 | 175 |
| Leu Trp Glu Lys Leu Asp Asn Thr Leu Lys Leu Pro Pro Thr Ala Thr |     |     |
| 180   | 185 | 190 |
| Gln Asp Gln Val Gln Gly Thr Val Thr Ile Arg Asn Ile Ser Ala Leu |     |     |
| 195   | 200 | 205 |
| Ser Ser Ala Gln Pro Arg Asn Ile Gly Leu Ile Ala Gly Ala Ile Gly |     |     |
| 210   | 215 | 220 |
| Thr Gly Ala Val Ile Ile Ile Phe Cys Ile Ala Leu Ile Leu Gly Ala |     |     |
| 225   | 230 | 235 |
| Phe Phe Tyr Trp Arg Ser Lys Asn Lys Glu Glu Glu Glu Glu Glu Ile |     |     |
| 245   | 250 | 255 |

Pro Asn Glu Ile Arg Glu Asp Asp Leu Pro Pro Lys Cys Ser Ser Ala  
260 265 270  
Lys Ala Phe His Thr Glu Ile Ser Ser Ser Asp Asn Asn Thr Leu Thr  
275 280 285  
Ser Ser Asn Ala Tyr Asn Ser Arg Tyr Trp Ser Asn Asn Pro Lys Val  
290 295 300  
His Arg Asn Thr Glu Ser Val Ser His Phe Ser Asp Leu Gly Gln Ser  
305 310 315 320  
Phe Ser Phe His Ser Gly Asn Ala Asn Ile Pro Ser Ile Tyr Ala Asn  
325 330 335  
Gly Thr His Leu Val Pro Gly Gln His Lys Thr Leu Val Val Thr Ala  
340 345 350  
Asn Arg Gly Ser Ser Pro Gln Val Met Ser Arg Ser Asn Gly Ser Val  
355 360 365  
Ser Arg Lys Pro Arg Pro Pro His Thr His Ser Tyr Thr Ile Ser His  
370 375 380  
Ala Thr Leu Glu Arg Ile Gly Ala Val Pro Val Met Val Pro Ala Gln  
385 390 395 400  
Ser Arg Ala Gly Ser Leu Val  
405

&lt;210&gt; 2422

&lt;211&gt; 209

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2422

Met Ala Ser Arg Gly Leu Ser Leu Phe Pro Glu Ser Cys Pro Asp Phe

|   |     |     |     |
|---|-----|-----|-----|
| 1   | 5   | 10  | 15  |
| Cys Cys Gly Thr Cys Asp Asp Gln Tyr Cys Cys Ser Asp Val Leu Lys |     |     |     |
| 20  | 25  | 30  |     |
| Lys Phe Val Trp Ser Glu Glu Arg Cys Ala Val Pro Glu Ala Ser Val |     |     |     |
| 35  | 40  | 45  |     |
| Pro Ala Ser Val Glu Pro Val Glu Gln Leu Gly Ser Ala Leu Arg Phe |     |     |     |
| 50  | 55  | 60  |     |
| Arg Pro Gly Tyr Asn Asp Pro Met Ser Gly Phe Gly Ala Thr Leu Ala |     |     |     |
| 65  | 70  | 75  | 80  |
| Val Gly Leu Thr Ile Phe Val Leu Ser Val Val Thr Ile Ile Ile Cys |     |     |     |
| 85  | 90  | 95  |     |
| Phe Thr Cys Ser Cys Cys Cys Leu Tyr Lys Thr Cys Arg Arg Pro Arg |     |     |     |
| 100   | 105 | 110 |     |
| Pro Val Val Thr Thr Thr Thr Ser Thr Thr Val Val His Ala Pro Tyr |     |     |     |
| 115   | 120 | 125 |     |
| Pro Gln Pro Pro Ser Val Pro Pro Ser Tyr Pro Gly Pro Ser Tyr Gln |     |     |     |
| 130   | 135 | 140 |     |
| Gly Tyr His Thr Met Pro Pro Gln Pro Gly Met Pro Ala Ala Pro Tyr |     |     |     |
| 145   | 150 | 155 | 160 |
| Pro Met Gln Tyr Pro Pro Pro Tyr Pro Ala Gln Pro Met Gly Pro Pro |     |     |     |
| 165   | 170 | 175 |     |
| Ala Tyr His Glu Thr Leu Ala Gly Gly Ala Ala Ala Pro Tyr Pro Ala |     |     |     |
| 180   | 185 | 190 |     |
| Ser Gln Pro Pro Tyr Asn Pro Ala Tyr Met Asp Ala Pro Lys Ala Ala |     |     |     |
| 195   | 200 | 205 |     |
| Leu   |     |     |     |

&lt;210&gt; 2423

&lt;211&gt; 590

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2423

Met Gly Phe His Leu Ile Thr Gln Leu Lys Gly Met Ser Val Val Leu

1 5 10 15

Val Leu Leu Pro Thr Leu Leu Leu Val Met Leu Thr Gly Ala Gln Arg

20 25 30

Ala Cys Pro Lys Asn Cys Arg Cys Asp Gly Lys Ile Val Tyr Cys Glu

35 40 45

Ser His Ala Phe Ala Asp Ile Pro Glu Asn Ile Ser Gly Gly Ser Gln

50 55 60

Gly Leu Ser Leu Arg Phe Asn Ser Ile Gln Lys Leu Lys Ser Asn Gln

65 70 75 80

Phe Ala Gly Leu Asn Gln Leu Ile Trp Leu Tyr Leu Asp His Asn Tyr

85 90 95

Ile Ser Ser Val Asp Glu Asp Ala Phe Gln Gly Ile Arg Arg Leu Lys

100 105 110

Glu Leu Ile Leu Ser Ser Asn Lys Ile Thr Tyr Leu His Asn Lys Thr

115 120 125

Phe His Pro Val Pro Asn Leu Arg Asn Leu Asp Leu Ser Tyr Asn Lys

130 135 140

Leu Gln Thr Leu Gln Ser Glu Gln Phe Lys Gly Leu Arg Lys Leu Ile

145 150 155 160

Ile Leu His Leu Arg Ser Asn Ser Leu Lys Thr Val Pro Ile Arg Val

165 170 175

Phe Gln Asp Cys Arg Asn Leu Asp Phe Leu Asp Leu Gly Tyr Asn Arg

|   |     |     |
|---|-----|-----|
| 180   | 185 | 190 |
| Leu Arg Ser Leu Ser Arg Asn Ala Phe Ala Gly Leu Leu Lys Leu Lys |     |     |
| 195   | 200 | 205 |
| Glu Leu His Leu Glu His Asn Gln Phe Ser Lys Ile Asn Phe Ala His |     |     |
| 210   | 215 | 220 |
| Phe Pro Arg Leu Phe Asn Leu Arg Ser Ile Tyr Leu Gln Trp Asn Arg |     |     |
| 225   | 230 | 235 |
| Ile Arg Ser Ile Ser Gln Gly Leu Thr Trp Thr Trp Ser Ser Leu His |     |     |
| 245   | 250 | 255 |
| Asn Leu Asp Leu Ser Gly Asn Asp Ile Gln Gly Ile Glu Pro Gly Thr |     |     |
| 260   | 265 | 270 |
| Phe Lys Cys Leu Pro Asn Leu Gln Lys Leu Asn Leu Asp Ser Asn Lys |     |     |
| 275   | 280 | 285 |
| Leu Thr Asn Ile Ser Gln Glu Thr Val Asn Ala Trp Ile Ser Leu Ile |     |     |
| 290   | 295 | 300 |
| Ser Ile Thr Leu Ser Gly Asn Met Trp Glu Cys Ser Arg Ser Ile Cys |     |     |
| 305   | 310 | 315 |
| Pro Leu Phe Tyr Trp Leu Lys Asn Phe Lys Gly Asn Lys Glu Ser Thr |     |     |
| 325   | 330 | 335 |
| Met Ile Cys Ala Gly Pro Lys His Ile Gln Gly Glu Lys Val Ser Asp |     |     |
| 340   | 345 | 350 |
| Ala Val Glu Thr Tyr Asn Ile Cys Ser Glu Val Gln Val Val Asn Thr |     |     |
| 355   | 360 | 365 |
| Glu Arg Ser His Leu Val Pro Gln Thr Pro Gln Lys Pro Leu Ile Ile |     |     |
| 370   | 375 | 380 |
| Pro Arg Pro Thr Ile Phe Lys Pro Asp Val Thr Gln Ser Thr Phe Glu |     |     |
| 385   | 390 | 395 |
| Thr Pro Ser Pro Ser Pro Gly Phe Gln Ile Pro Gly Ala Glu Gln Glu |     |     |
| 405   | 410 | 415 |

Tyr Glu His Val Ser Phe His Lys Ile Ile Ala Gly Ser Val Ala Leu  
420 425 430  
Phe Leu Ser Val Ala Met Ile Leu Leu Val Ile Tyr Val Ser Trp Lys  
435 440 445  
Arg Tyr Pro Ala Ser Met Lys Gln Leu Gln Gln His Ser Leu Met Lys  
450 455 460  
Arg Arg Arg Lys Lys Ala Arg Glu Ser Glu Arg Gln Met Asn Ser Pro  
465 470 475 480  
Leu Gln Glu Tyr Tyr Val Asp Tyr Lys Pro Thr Asn Ser Glu Thr Met  
485 490 495  
Asp Ile Ser Val Asn Gly Ser Gly Pro Cys Thr Tyr Thr Ile Ser Gly  
500 505 510  
Ser Arg Glu Cys Glu Met Pro His His Met Lys Pro Leu Pro Tyr Tyr  
515 520 525  
Ser Tyr Gly Gln Pro Val Ile Gly Tyr Cys Gln Ala His Gln Pro Leu  
530 535 540  
His Val Thr Lys Gly Tyr Glu Thr Val Ser Pro Glu Gln Asp Glu Ser  
545 550 555 560  
Pro Gly Leu Glu Leu Gly Arg Asp His Ser Phe Ile Ala Thr Ile Ala  
565 570 575  
Arg Ser Ala Ala Pro Ala Ile Tyr Leu Glu Arg Ile Ala Asn  
580 585 590

&lt;210&gt; 2424

&lt;211&gt; 144

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2424

|     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| Met | Ile | Arg | Ile | Ile | Asn | Ala | Phe | Ser | Leu | Pro | Thr | Tyr | Leu | Ser | Ser |
| 1   |     |     |     | 5   |     |     |     |     |     | 10  |     |     |     | 15  |     |
| His | Asp | Asn | Leu | Lys | Ile | Ser | Leu | Val | Ala | Phe | Pro | Leu | Lys | Pro | Thr |
|     |     |     | 20  |     |     |     |     | 25  |     |     |     |     | 30  |     |     |
| Phe | Pro | Val | Gly | Leu | Asn | Ser | Leu | Phe | Ser | Leu | Ile | Trp | Cys | Phe | Pro |
|     |     |     | 35  |     |     |     |     | 40  |     |     |     |     | 45  |     |     |
| Ser | His | Leu | Phe | Phe | Lys | Val | Pro | Phe | Leu | Gln | Thr | Leu | Lys | Ser | Thr |
|     | 50  |     |     |     |     | 55  |     |     |     |     | 60  |     |     |     |     |
| Ser | Leu | Thr | Lys | Phe | Leu | Phe | Ile | Ile | Lys | His | Phe | Asp | Ile | Leu | Ser |
|     | 65  |     |     |     |     | 70  |     |     |     |     | 75  |     |     | 80  |     |
| Leu | Asn | Phe | Ala | Phe | Ala | Glu | Ser | Leu | Pro | Phe | Gly | Val | Leu | Ser | Met |
|     |     |     |     |     | 85  |     |     |     |     | 90  |     |     |     | 95  |     |
| Lys | Tyr | Ser | Ala | Asp | Phe | Tyr | Leu | Gly | Phe | Lys | Trp | Gly | Ser | Ile | Lys |
|     |     |     | 100 |     |     |     |     |     | 105 |     |     |     |     | 110 |     |
| Asn | Thr | Ser | His | Phe | Cys | Asn | Asn | Gly | Ile | Thr | Val | Ser | Ser | Cys | Met |
|     |     |     | 115 |     |     |     |     |     | 120 |     |     |     |     | 125 |     |
| Gln | Ala | Ile | Lys | Leu | Phe | Arg | Val | Trp | Phe | Tyr | Thr | Glu | Asn | Leu | Ile |
|     |     |     | 130 |     |     |     |     | 135 |     |     |     |     |     | 140 |     |

&lt;210&gt; 2425

&lt;211&gt; 100

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2425

|     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| Met | Lys | Val | Ser | Glu | Thr | Tyr | Thr | Asp | Thr | Asn | Ser | Thr | Ala | Gly | Gln |
| 1   |     |     |     |     | 5   |     |     |     |     | 10  |     |     |     | 15  |     |



His Ala Gly Phe Ser Val Gln Arg Arg Tyr Ile Asp Gln Gln Ala Val  
                   20                                  25                                  30  
 Arg Cys Gln Ile Arg Leu Leu Arg Glu Glu Thr Pro Leu Gln Gly Val  
                   35                                  40                                  45  
 Trp Lys Glu His Val Trp Lys Gly Ala Gly His Met Glu Pro Arg Asn  
                   50                                  55                                  60  
 Asn Cys Ser Pro Ser Val His Thr Ala Gln Arg Glu Arg Gly Glu Glu  
                   65                                  70                                  75                                  80  
 Phe Gln Ala Arg Ala Thr Glu Ala Leu Glu Ala Val Leu Arg Arg Glu  
                                   85                                  90                                  95  
 Thr Ser Ser Arg  
                                   100

<210> 2426

<211> 141

<212> PRT

<213> Homo sapiens

<400> 2426

Met Ala Glu Arg Gly Gln His Glu Ala Gln Ala Met Ala Ser Glu Gly  
           1                                  5                                  10                                  15  
 Glu Ser Leu Lys Pro Trp Gln Leu Pro Cys Asp Val Glu His Val Gly  
                   20                                  25                                  30  
 Ala Gln Lys Ser Arg Asn Gly Val Trp Glu Pro Leu Ser Arg Phe Gln  
                   35                                  40                                  45  
 Lys Met Tyr Gly Asn Ala Trp Met Pro Arg Gln Lys Phe Ala Ala Gly  
                   50                                  55                                  60  
 Ala Gly Leu Ser Trp Arg Thr Ser Ala Arg Ala Val Gln Lys Gly Asn

|   |     |     |     |
|---|-----|-----|-----|
| 65  | 70  | 75  | 80  |
| Val Gly Leu Glu Pro Pro His Arg Val Pro Thr Gly Thr Pro Pro Ser |     |     |     |
|   | 85  | 90  | 95  |
| Gly Ala Val Arg Arg Gly Pro Leu Ser Ser Arg Pro Gln Asn Gly Arg |     |     |     |
|   | 100 | 105 | 110 |
| Ser Thr Tyr Ser Leu Tyr Gln Val Pro Gly Lys Ala Ala Asp Thr Gln |     |     |     |
|   | 115 | 120 | 125 |
| His Gln Pro Met Lys Ala Ala Arg Met Glu Ala Val Pro             |     |     |     |
|   | 130 | 135 | 140 |

&lt;210&gt; 2427

&lt;211&gt; 292

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2427

|   |    |    |    |
|---|----|----|----|
| Met Thr Glu Leu Leu Asn Arg Val Asp Lys Lys Ala Ala Pro Gln Thr |    |    |    |
| 1   | 5  | 10 | 15 |
| Glu Ser Gly Ser Ser Asn Ala Ser Cys Arg Asn Val Leu Lys Gly Ser |    |    |    |
|   | 20 | 25 | 30 |
| Ser Gln Gly Ser Cys Leu Ile Gly Ser Ser Ile Ser Thr Gln Gly Asn |    |    |    |
|   | 35 | 40 | 45 |
| His Lys Lys Asn Met Lys Ile Lys Ala Asp Met Glu Val Pro Lys Asp |    |    |    |
|   | 50 | 55 | 60 |
| Ser Leu Val Lys Glu Ala Asn Glu Asn Leu Gln Glu Asp Glu Asp Asp |    |    |    |
|   | 65 | 70 | 75 |
| Ala Val Ala Asp Ser Val Phe Gln Ser His Ile Ile Glu Ser Asn Cys |    |    |    |
|   | 85 | 90 | 95 |

Gln Met Arg Thr Leu Asp Ser Gly Ile Gly Thr Phe Pro Leu Pro Asp  
100 105 110  
Ser Gly Asn Arg Ser Thr Gly Arg Tyr Leu Cys Gln Pro Asp Ser Pro  
115 120 125  
Glu Asp Ala Glu Pro Leu Leu Pro Leu Gln Ser Ala Leu Ser Ala Val  
130 135 140  
Ser Ser Met Arg Ala Gln Thr Leu Glu Arg Glu Val Pro Ser Ser Thr  
145 150 155 160  
Asp Gly Gln Arg Pro Ala Asp Ser Ala Ile Val His Ser Thr Ser Asp  
165 170 175  
Pro Ile Met Thr Ala Arg Gly Met Arg Pro Leu Gln Ser Arg Leu Pro  
180 185 190  
Lys Pro Ala Ser Ser Gly Lys Val Ser Ser Gln Lys Gln Asn Glu Ala  
195 200 205  
Glu Pro Arg Pro Gln Thr Cys Ser Ser Phe Gly Tyr Ala Glu Asp Pro  
210 215 220  
Met Ala Ser Gln Pro Leu Pro Asp Trp Gly Ser Glu Val Ala Ala Thr  
225 230 235 240  
Gly Thr Gln Asp Lys Ala Pro Arg Met Cys Thr Tyr Ser Ala Ser Gly  
245 250 255  
Gly Ser Asn Ser Asp Ser Asp Leu Asp Tyr Gly Asp Asn Gly Phe Gly  
260 265 270  
Ala Gly Arg Gly Gln Leu Val Lys Ala Leu Lys Ser Ala Ala Pro Glu  
275 280 285  
Ile Glu Thr Thr  
290

&lt;210&gt; 2428

&lt;211&gt; 599

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2428

Met Asp Gly Thr Asp Cys Asp Leu Gly Lys Trp Cys Lys Ala Gly Glu

1 5 10 15

Cys Thr Ser Arg Thr Ser Ala Pro Glu His Leu Ala Gly Glu Trp Ser

20 25 30

Leu Trp Ser Pro Cys Ser Arg Thr Cys Ser Ala Gly Ile Ser Ser Arg

35 40 45

Glu Arg Lys Cys Pro Gly Leu Asp Ser Glu Ala Arg Asp Cys Asn Gly

50 55 60

Pro Arg Lys Gln Tyr Arg Ile Cys Glu Asn Pro Pro Cys Pro Ala Gly

65 70 75 80

Leu Pro Gly Phe Arg Asp Trp Gln Cys Gln Ala Tyr Ser Val Arg Thr

85 90 95

Ser Ser Pro Lys His Ile Leu Gln Trp Gln Ala Val Leu Asp Glu Glu

100 105 110

Lys Pro Cys Ala Leu Phe Cys Ser Pro Val Gly Lys Glu Gln Pro Ile

115 120 125

Leu Leu Ser Glu Lys Val Met Asp Gly Thr Ser Cys Gly Tyr Gln Gly

130 135 140

Leu Asp Ile Cys Ala Asn Gly Arg Cys Gln Lys Val Gly Cys Asp Gly

145 150 155 160

Leu Leu Gly Ser Leu Ala Arg Glu Asp His Cys Gly Val Cys Asn Gly

165 170 175

Asn Gly Lys Ser Cys Lys Ile Ile Lys Gly Asp Phe Asn His Thr Arg

180 185 190

Gly Ala Gly Tyr Val Glu Val Leu Val Ile Pro Ala Gly Ala Arg Arg  
195 200 205

Ile Lys Val Val Glu Glu Lys Pro Ala His Ser Tyr Leu Ala Leu Arg  
210 215 220

Asp Ala Gly Lys Gln Ser Ile Asn Ser Asp Trp Lys Ile Glu His Ser  
225 230 235 240

Gly Ala Phe Asn Leu Ala Gly Thr Thr Val His Tyr Val Arg Arg Gly  
245 250 255

Leu Trp Glu Lys Ile Ser Ala Lys Gly Pro Thr Thr Ala Pro Leu His  
260 265 270

Leu Leu Val Leu Leu Phe Gln Asp Gln Asn Tyr Gly Leu His Tyr Glu  
275 280 285

Tyr Thr Ile Pro Ser Asp Pro Leu Pro Glu Asn Gln Ser Ser Lys Ala  
290 295 300

Pro Glu Pro Leu Phe Met Trp Thr His Thr Ser Trp Glu Asp Cys Asp  
305 310 315 320

Ala Thr Cys Gly Gly Gly Glu Arg Lys Thr Thr Val Ser Cys Thr Lys  
325 330 335

Ile Met Ser Lys Asn Ile Ser Ile Val Asp Asn Glu Lys Cys Lys Tyr  
340 345 350

Leu Thr Lys Pro Glu Pro Gln Ile Arg Lys Cys Asn Glu Gln Pro Cys  
355 360 365

Gln Thr Arg Trp Met Met Thr Glu Trp Thr Pro Cys Ser Arg Thr Cys  
370 375 380

Gly Lys Gly Met Gln Ser Arg Gln Val Ala Cys Thr Gln Gln Leu Ser  
385 390 395 400

Asn Gly Thr Leu Ile Arg Ala Arg Glu Arg Asp Cys Ile Gly Pro Lys  
405 410 415

Pro Ala Ser Ala Gln Arg Cys Glu Gly Gln Asp Cys Met Thr Val Trp

420                                      425                                      430  
 Glu Ala Gly Val Trp Ser Glu Cys Ser Val Lys Cys Gly Lys Gly Ile  
 435                                      440                                      445  
 Arg His Arg Thr Val Arg Cys Thr Asn Pro Arg Arg Lys Cys Val Leu  
 450                                      455                                      460  
 Ser Thr Arg Pro Arg Glu Ala Glu Asp Cys Glu Asp Tyr Ser Lys Cys  
 465                                      470                                      475                                      480  
 Tyr Val Trp Arg Met Gly Asp Trp Ser Lys Cys Ser Ile Thr Cys Gly  
 485                                      490                                      495  
 Lys Gly Met Gln Ser Arg Val Ile Gln Cys Met His Lys Ile Thr Gly  
 500                                      505                                      510  
 Arg His Gly Asn Gly Cys Phe Ser Ser Glu Lys Pro Ala Ala Tyr Arg  
 515                                      520                                      525  
 Pro Cys His Leu Gln Pro Cys Asn Glu Lys Ile Asn Val Asn Thr Ile  
 530                                      535                                      540  
 Thr Ser Pro Arg Leu Ala Ala Leu Thr Phe Lys Cys Leu Gly Asp Gln  
 545                                      550                                      555                                      560  
 Trp Pro Val Tyr Cys Arg Val Ile Arg Glu Lys Asn Leu Cys Gln Asp  
 565                                      570                                      575  
 Met Arg Trp Tyr Gln Arg Cys Cys Glu Thr Cys Arg Asp Phe Tyr Ala  
 580                                      585                                      590  
 Gln Lys Leu Gln Gln Lys Ser  
 595

&lt;210&gt; 2429

&lt;211&gt; 105

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2429

Met Gln Arg Arg Thr Thr Met Arg Tyr His Leu Met Pro Val Arg Met  
 1 5 10 15  
 Val Ile Ile Lys Lys Ser Lys Asn Asn Arg Cys Trp Arg Gly Cys Gly  
 20 25 30  
 Glu Val Gly Thr Leu Leu His Cys Trp Trp Glu Cys Lys Leu Val Gln  
 35 40 45  
 Pro Leu Trp Lys Cys Val Trp Leu Phe Leu Lys Asp Leu Glu Leu Glu  
 50 55 60  
 Ile Leu Phe Val Pro Ala Ile Pro Leu Leu Gly Ile Tyr Pro Lys Glu  
 65 70 75 80  
 Tyr Lys Pro Phe Tyr Tyr Lys Asp Thr Cys Thr Phe Leu Phe Ile Ala  
 85 90 95  
 Ala Leu Phe Thr Ile Ala Lys Thr Gln  
 100 105

&lt;210&gt; 2430

&lt;211&gt; 166

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2430

Met Lys Ser Lys Glu Arg His Pro Cys Ser Pro Ser Asp His Arg Arg  
 1 5 10 15  
 Ser Arg Ser Pro Ser Gln Arg Arg Thr Arg Ser Arg Ser Ser Ser Trp  
 20 25 30  
 Gly Arg Asn Arg Arg Arg Ser Asp Ser Leu Lys Glu Ser Arg His Arg

35                                      40                                      45  
 Arg Phe Ser Tyr Ser Gln Ser Lys Ser Arg Ser Lys Ser Leu Pro Arg  
 50                                      55                                      60  
 Arg Ser Thr Ser Ala Arg Gln Ser Arg Thr Pro Arg Arg Asn Phe Gly  
 65                                      70                                      75                                      80  
 Ser Arg Gly Arg Ser Arg Ser Lys Ser Leu Gln Lys Arg Ser Lys Ser  
 85                                      90                                      95  
 Ile Gly Lys Ser Gln Ser Ser Ser Pro Gln Lys Gln Thr Ser Ser Gly  
 100                                      105                                      110  
 Thr Lys Ser Arg Ser His Gly Arg His Ser Asp Ser Ile Ala Arg Ser  
 115                                      120                                      125  
 Pro Cys Lys Ser Pro Lys Gly Tyr Thr Asn Ser Glu Thr Lys Val Gln  
 130                                      135                                      140  
 Thr Ala Lys His Ser His Phe Arg Ser His Ser Arg Ser Arg Ser Tyr  
 145                                      150                                      155                                      160  
 Arg His Lys Asn Ser Trp  
 165

<210> 2431

<211> 171

<212> PRT

<213> Homo sapiens

<400> 2431

Met Arg Glu Glu Met Ser Leu Gly Cys Gln Glu Ala Phe Glu Ile Phe  
 1                                      5                                      10                                      15  
 Lys Arg Asp His Ala Asp Ser Val Thr Ile Asp Asp Asn Lys Gln Ile  
 20                                      25                                      30



Leu Lys Gln Arg Phe Ser Glu Ala Lys Ala Leu Gly Glu Ser Ile Asn  
                   35                                  40                                  45  
 Glu Ala Arg Ser Lys Ile Gly His Leu Lys Glu Glu Ile Thr Gln Arg  
                   50                                  55                                  60  
 His Ile Gln Gln Val Ala Leu Gly Ile Ser Glu Asn Met Ala Val Pro  
                   65                                  70                                  75                                  80  
 Leu Met Pro Asp Gln Gln Glu Glu Lys Leu Arg Ser Gln Leu Glu Glu  
                                   85                                  90                                  95  
 Glu Lys Arg Arg Tyr Lys Thr Met Phe Thr Arg Leu Lys Ala Leu Lys  
                                   100                                  105                                  110  
 Val Glu Ile Glu His Leu Gln Leu Leu Met Asp Lys Ala Lys Val Lys  
                                   115                                  120                                  125  
 Leu Gln Lys Glu Phe Glu Val Trp Trp Ala Glu Glu Ala Thr Asn Leu  
                                   130                                  135                                  140  
 Gln Val Asn Ser Pro Ala Val Asn Ser Leu Asp His Thr Lys Ser Lys  
                                   145                                  150                                  155                                  160  
 Ile Lys Ala Leu Ala Asp Ser Met Ser Val Met  
                                   165                                  170

&lt;210&gt; 2432

&lt;211&gt; 112

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2432

Met Pro Thr Ser Ser Phe Tyr Ala Cys Leu Thr Leu Phe Leu His Thr  
                   1                                  5                                  10                                  15  
 Gly Pro Arg Cys His Leu Gln Glu Ala Phe Ser His Pro Ile Leu Val

|     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
|     | 20  |     | 25  |     | 30  |     |     |     |     |     |     |     |     |     |     |
| Arg | Ser | Gly | Cys | His | Asn | Lys | Ile | Ser | Ser | Ile | Gly | Tyr | Leu | Arg | Asn |
|     | 35  |     | 40  |     | 45  |     |     |     |     |     |     |     |     |     |     |
| Asn | Arg | Asn | Val | Phe | Leu | Thr | Val | Leu | Lys | Thr | Gly | Gln | Ser | Trp | Val |
|     | 50  |     | 55  |     | 60  |     |     |     |     |     |     |     |     |     |     |
| Arg | Val | Leu | Val | Glu | Ser | Val | Ser | Gly | Glu | Gly | Leu | Arg | Cys | Leu | Ser |
|     | 65  |     | 70  |     | 75  |     |     |     |     |     |     |     |     |     |     |
| Thr | Val | Ser | Pro | Arg | Gly | Gly | Gly | Val | Arg | Gly | Leu | Pro | Gln | Gly | Ser |
|     |     |     | 85  |     | 90  |     |     |     |     |     |     |     |     | 95  |     |
| Phe | Ile | Arg | Thr | Arg | Ile | Pro | Phe | Met | Arg | Ala | Asn | His | Pro | Met | Ala |
|     | 100 |     | 105 |     | 110 |     |     |     |     |     |     |     |     |     |     |

&lt;210&gt; 2433

&lt;211&gt; 341

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2433

|     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| Met | Asn | Cys | Asn | Phe | Gln | Lys | His | Ala | Pro | Leu | Glu | Glu | Phe | Tyr | Ser |
| 1   |     |     |     | 5   |     |     |     |     | 10  |     |     |     |     | 15  |     |
| Phe | Gly | Glu | Ser | Met | Cys | Glu | Tyr | Phe | Gly | His | Arg | Gly | Ser | Lys | Gln |
|     |     |     |     | 20  |     |     |     |     | 25  |     |     |     |     | 30  |     |
| Leu | His | Arg | Gly | Lys | Pro | Val | Arg | Leu | Gly | Tyr | Lys | Ile | Trp | Cys | Gly |
|     |     |     |     | 35  |     |     |     |     | 40  |     |     |     |     | 45  |     |
| Thr | Thr | Ser | Arg | Gly | Tyr | Leu | Val | Trp | Phe | Glu | Pro | Ser | Gln | Gly | Thr |
|     |     |     |     | 50  |     |     |     |     | 55  |     |     |     |     | 60  |     |
| Leu | Phe | Thr | Lys | Pro | Asp | Arg | Ser | Leu | Asp | Leu | Gly | Gly | Ser | Met | Val |
|     |     |     |     | 65  |     |     |     |     | 70  |     |     |     |     | 75  |     |
|     |     |     |     |     |     |     |     |     |     |     |     |     |     |     | 80  |

|   |     |     |     |
|---|-----|-----|-----|
| Ile Lys Phe Val Asp Ala Leu Gln Glu Arg Gly Phe Leu Pro Tyr His |     |     |     |
|   | 85  | 90  | 95  |
| Ile Phe Phe Asp Lys Val Phe Thr Ser Val Lys Leu Met Ser Ile Leu |     |     |     |
|   | 100 | 105 | 110 |
| Arg Lys Lys Gly Val Lys Ala Thr Gly Thr Val Arg Glu Tyr Arg Thr |     |     |     |
|   | 115 | 120 | 125 |
| Glu Arg Cys Pro Leu Lys Asp Pro Lys Glu Leu Lys Lys Met Lys Arg |     |     |     |
|   | 130 | 135 | 140 |
| Gly Ser Phe Asp Tyr Lys Val Asp Glu Ser Glu Glu Ile Ile Val Cys |     |     |     |
|   | 145 | 150 | 155 |
| Arg Trp His Asp Ser Ser Val Val Asn Ile Cys Ser Asn Ala Val Gly |     |     |     |
|   | 165 | 170 | 175 |
| Ile Glu Pro Val Arg Leu Thr Ser Arg His Ser Gly Ala Ala Lys Thr |     |     |     |
|   | 180 | 185 | 190 |
| Arg Thr Gln Val His Gln Pro Ser Leu Val Lys Leu Tyr Gln Glu Lys |     |     |     |
|   | 195 | 200 | 205 |
| Val Gly Gly Val Gly Arg Met Asp Gln Asn Ile Ala Lys Tyr Lys Val |     |     |     |
|   | 210 | 215 | 220 |
| Lys Ile Arg Gly Met Lys Trp Tyr Ser Ser Phe Ile Gly Tyr Val Ile |     |     |     |
|   | 225 | 230 | 235 |
| Asp Ala Ala Leu Asn Asn Ala Trp Gln Leu His Arg Ile Cys Cys Gln |     |     |     |
|   | 245 | 250 | 255 |
| Asp Ala Gln Val Asp Leu Leu Ala Phe Arg Arg Tyr Ile Ala Cys Val |     |     |     |
|   | 260 | 265 | 270 |
| Tyr Leu Glu Ser Asn Ala Asp Thr Thr Ser Gln Gly Arg Arg Ser Arg |     |     |     |
|   | 275 | 280 | 285 |
| Arg Leu Glu Thr Glu Ser Arg Phe Asp Met Ile Gly His Trp Ile Ile |     |     |     |
|   | 290 | 295 | 300 |
| His Gln Asp Lys Arg Thr Arg Cys Ala Leu Cys His Ser Gln Thr Asn |     |     |     |

305                      310                      315                      320  
 Thr Arg Cys Glu Lys Cys Gln Lys Gly Val His Ala Lys Cys Phe Arg  
                          325                      330                      335  
 Glu Tyr His Ile Arg  
                          340

<210> 2434

<211> 102

<212> PRT

<213> Homo sapiens

<400> 2434

Met Val Ile Lys Val Leu Gln Met Ser Thr Cys Arg Phe Tyr Lys Lys  
     1                      5                      10                      15  
 Ser Val Leu Lys Leu Leu Tyr Gln Arg Lys Val Gln His Arg Glu Leu  
                          20                      25                      30  
 Asn Ala Gln Ile Thr Arg Arg Leu Leu Gly Met Leu Val Ser Asp Phe  
                          35                      40                      45  
 Tyr Val Lys Ile Leu Pro Phe Ser Ser Arg Ala Ser Lys Arg Ser Lys  
                          50                      55                      60  
 Tyr Pro Leu Ser Asp Ser Ile Lys Arg Val Ile Lys Tyr Phe Ser Lys  
                          65                      70                      75                      80  
 Lys Arg Gly Ser Thr Gln Trp Val Glu Cys Arg Asn His Gly Glu Val  
                          85                      90                      95  
 Ser Gln Ser Ala Ser Phe  
                          100

&lt;210&gt; 2435

&lt;211&gt; 159

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2435

Met Ser Pro Ser Trp Glu Gln Pro Pro Ser Ser Gly Pro Val Ala Ile  
1 5 10 15  
Gln Leu Gln Ser Glu His Ser Thr Ser Cys Thr Gly Ile Ser Ala Gly  
20 25 30  
Glu Lys Asp Ile Arg Val Thr Ile Ser Thr Thr Gly Arg Glu Leu Gln  
35 40 45  
Gly Arg Arg Gln Pro Thr Leu Ser Leu Gln Pro Asn Cys Thr Ser Pro  
50 55 60  
Leu Arg Cys Gly Ala Pro Ala Ser Lys Ala Arg Glu Leu Ser Phe Pro  
65 70 75 80  
Lys Ala Asp Leu Asn Met Ser Leu Ser Pro Leu Lys Glu Asn Asn Asn  
85 90 95  
Asp Thr Phe Tyr Leu Phe Ile Leu Arg Glu Gly Leu Thr Leu Leu Pro  
100 105 110  
Arg Leu Glu Cys Ser Gly Met Ile Thr Ala His Tyr Ser Leu Gly Leu  
115 120 125  
Pro Gly Ser Ser Gly Pro Pro Thr Ser Ala Ser Gln Gly Ser Gly Thr  
130 135 140  
Thr Gly Met Cys His His Thr Trp Leu Thr Leu Asn Lys Phe Leu  
145 150 155

&lt;210&gt; 2436

&lt;211&gt; 131

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2436

Met Ser Pro Val Ser Arg Val Glu Ile Asp Val Leu Gln Asn Ser Leu

1 5 10 15

Leu Asp Asp Leu Ala Pro Gly Ser Gly Lys Ser Glu Pro Arg Pro Arg

20 25 30

Phe Thr Val Leu Pro Gln Ile Leu Gly Met Leu Gln Glu Ala Glu Leu

35 40 45

Gln Gly Pro Ser Gly Phe Arg Pro Gln Thr Pro Gly Ser Leu Gln Ser

50 55 60

His His Glu Ser Cys Ser Val Ala Gln Ala Gly Val Gln Trp Cys Asp

65 70 75 80

Leu Gly Ser Leu Gln Arg Leu Pro Pro Arg Phe Lys Arg Phe Ser His

85 90 95

Leu Ser Leu Leu Asn Arg Trp Asp Tyr Arg His Pro Pro Pro Arg Pro

100 105 110

Asp Asn Ile Cys Ile Phe Ser Arg Asp Gly Val Ser Thr Tyr Ser Pro

115 120 125

Gly Trp Pro

130

&lt;210&gt; 2437

&lt;211&gt; 673

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2437

Met Thr Ala Pro Pro Ile Ser His Glu Tyr Tyr Asp Pro Ala Glu Phe  
 1 5 10 15  
 Met Glu Gly Gly Pro Gln Glu Ala Asp Arg Leu Asp Glu Leu Glu Tyr  
 20 25 30  
 Glu Glu Val Glu Leu Tyr Lys Ser Ser His Arg Asp Lys Leu Gly Leu  
 35 40 45  
 Met Val Cys Tyr Arg Thr Asp Asp Glu Glu Asp Leu Gly Ile Tyr Val  
 50 55 60  
 Gly Glu Val Asn Pro Asn Ser Ile Ala Ala Lys Asp Gly Arg Ile Arg  
 65 70 75 80  
 Glu Gly Asp Arg Ile Ile Gln Ile Asn Gly Val Asp Val Gln Asn Arg  
 85 90 95  
 Glu Glu Ala Val Ala Ile Leu Ser Gln Glu Glu Asn Thr Asn Ile Ser  
 100 105 110  
 Leu Leu Val Ala Arg Pro Glu Ser Gln Leu Ala Lys Arg Trp Lys Asp  
 115 120 125  
 Ser Asp Arg Asp Asp Phe Leu Asp Asp Phe Gly Ser Glu Asn Glu Gly  
 130 135 140  
 Glu Leu Arg Ala Arg Lys Leu Lys Ser Pro Pro Ala Gln Gln Pro Gly  
 145 150 155 160  
 Asn Glu Glu Glu Lys Gly Ala Pro Asp Ala Gly Pro Gly Leu Ser Asn  
 165 170 175  
 Ser Gln Glu Leu Asp Ser Gly Val Gly Arg Thr Asp Glu Ser Thr Arg  
 180 185 190  
 Asn Glu Glu Ser Ser Glu His Asp Leu Leu Gly Asp Glu Pro Pro Ser  
 195 200 205  
 Ser Thr Asn Thr Pro Gly Ser Leu Arg Lys Phe Gly Leu Gln Gly Asp

210 215 220  
Ala Leu Gln Ser Arg Asp Phe His Phe Ser Met Asp Ser Leu Leu Ala  
225 230 235 240  
Glu Gly Ala Gly Leu Gly Gly Gly Asp Val Pro Gly Leu Thr Asp Glu  
245 250 255  
Glu Tyr Glu Arg Tyr Arg Glu Leu Leu Glu Ile Lys Cys His Leu Glu  
260 265 270  
Asn Gly Asn Gln Leu Gly Leu Leu Phe Pro Arg Ala Ser Gly Gly Asn  
275 280 285  
Ser Ala Leu Asp Val Asn Arg Asn Glu Ser Leu Gly His Glu Met Ala  
290 295 300  
Met Leu Glu Glu Glu Leu Arg His Leu Glu Phe Lys Cys Arg Asn Ile  
305 310 315 320  
Leu Arg Ala Gln Lys Met Gln Gln Leu Arg Glu Arg Cys Met Lys Ala  
325 330 335  
Trp Leu Leu Glu Glu Glu Ser Leu Tyr Asp Leu Ala Ala Ser Glu Pro  
340 345 350  
Lys Lys His Glu Leu Ser Asp Ile Ser Glu Leu Pro Glu Lys Ser Asp  
355 360 365  
Lys Asp Ser Thr Ser Ala Tyr Asn Thr Gly Glu Ser Cys Arg Ser Thr  
370 375 380  
Pro Leu Leu Val Glu Pro Leu Pro Glu Ser Pro Leu Arg Arg Ala Met  
385 390 395 400  
Ala Gly Asn Ser Asn Leu Asn Arg Thr Pro Pro Gly Pro Ala Val Ala  
405 410 415  
Thr Pro Ala Lys Ala Ala Pro Pro Pro Gly Ser Pro Ala Lys Phe Arg  
420 425 430  
Ser Leu Ser Arg Asp Pro Glu Ala Gly Arg Arg Gln His Ala Glu Glu  
435 440 445



Arg Gly Arg Arg Asn Pro Lys Thr Gly Leu Thr Leu Glu Arg Val Gly  
450 455 460

Pro Glu Ser Ser Pro Tyr Leu Ser Arg Arg His Arg Gly Gln Gly Gln  
465 470 475 480

Glu Gly Glu His Tyr His Ser Cys Val Gln Leu Ala Pro Thr Arg Gly  
485 490 495

Leu Glu Glu Leu Gly His Gly Pro Leu Ser Leu Ala Gly Gly Pro Arg  
500 505 510

Val Gly Gly Val Ala Ala Ala Ala Thr Glu Ala Pro Arg Met Glu Trp  
515 520 525

Lys Val Lys Val Arg Ser Asp Gly Thr Arg Tyr Val Ala Lys Arg Pro  
530 535 540

Val Arg Asp Arg Leu Leu Lys Ala Arg Ala Leu Lys Ile Arg Glu Glu  
545 550 555 560

Arg Ser Gly Met Thr Thr Asp Asp Asp Ala Val Ser Glu Met Lys Met  
565 570 575

Gly Arg Tyr Trp Ser Lys Glu Glu Arg Lys Gln His Leu Ile Arg Ala  
580 585 590

Arg Glu Gln Arg Lys Arg Arg Glu Phe Met Met Gln Ser Arg Leu Glu  
595 600 605

Cys Leu Arg Glu Gln Gln Asn Gly Asp Ser Lys Pro Glu Leu Asn Ile  
610 615 620

Ile Ala Leu Ser His Arg Lys Thr Met Lys Lys Arg Asn Lys Lys Ile  
625 630 635 640

Leu Asp Asn Trp Ile Thr Ile Gln Glu Met Leu Ala His Gly Ala Arg  
645 650 655

Ser Ala Asp Gly Lys Arg Val Tyr Asn Pro Leu Leu Ser Val Thr Thr  
660 665 670

Val

&lt;210&gt; 2438

&lt;211&gt; 142

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2438

Met Ala Phe Ser Ser Thr His Pro His Thr Ala Cys Arg Lys Gly Pro  
 1 5 10 15  
 Arg Glu Lys Ser Gln Gly Arg Lys Ala Glu Glu Asp Gly Pro Gly Phe  
 20 25 30  
 Gly Leu Ser Val Leu Gly Ala Leu Leu Pro Gln Glu Gly Gln Arg Gly  
 35 40 45  
 Pro Trp Cys Cys Cys His His Tyr His Pro Gly His Glu Ile Ala Gly  
 50 55 60  
 Leu Gly Gln Thr Gln Arg Arg Thr Gly Arg Ala Arg Val Ser Gln Glu  
 65 70 75 80  
 His Ser Ser Ser Ala Leu Gly Cys Trp Gln Val Ala Leu Met Ala Phe  
 85 90 95  
 Gln Arg Gln Ser Leu His Pro Gly Gln Ser Ser Leu Phe Ser Gly Ala  
 100 105 110  
 Lys His Ile Gly Ser Phe Val Gln Phe Ile Asn Ser Thr Ser Leu Phe  
 115 120 125  
 Leu Arg Glu Thr Trp Leu Trp Pro Val Leu Leu Pro His Pro  
 130 135 140

&lt;210&gt; 2439

&lt;211&gt; 120

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2439

Met Arg Ser Gly Gln Asp Pro Gln Thr Pro Ser Gly Asn Thr Lys His

1 5 10 15

Pro Glu Ser Arg Leu Gln Glu Pro Cys Gly Val Arg Leu Cys Gln Arg

20 25 30

Tyr Thr Ala Gly His Lys Cys Pro Leu Ser Val Pro Pro Phe Arg Ala

35 40 45

Val Pro Cys Leu Ser Gln Gly Pro Val Thr Ser Leu Gln Gln Ser Pro

50 55 60

Ile Pro Ala Thr Pro Gly Ser Val Arg Pro Thr Leu Phe Pro Arg Glu

65 70 75 80

Arg Arg Arg Glu Lys Thr Gly Trp Ala Arg Trp Leu Thr Pro Val Ile

85 90 95

Pro Ala Leu Trp Glu Val Glu Val Gly Gly Ser Pro Glu Val Arg Ser

100 105 110

Leu Arg Pro Ala Trp Pro Thr Trp

115 120

&lt;210&gt; 2440

&lt;211&gt; 275

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2440

|     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| Met | Ser | Thr | Ile | Gly | Ser | Phe | Glu | Gly | Phe | Gln | Ala | Val | Ser | Leu | Lys |
| 1   |     |     |     | 5   |     |     |     |     | 10  |     |     |     |     | 15  |     |
| Gln | Glu | Gly | Asp | Asp | Gln | Pro | Ser | Glu | Thr | Asp | His | Leu | Ser | Met | Glu |
|     |     |     | 20  |     |     |     |     | 25  |     |     |     |     | 30  |     |     |
| Glu | Glu | Asp | Pro | Met | Pro | Arg | Gln | Ile | Ser | Arg | Gln | Ser | Ser | Val | Thr |
|     |     | 35  |     |     |     |     | 40  |     |     |     |     | 45  |     |     |     |
| Glu | Ser | Thr | Leu | Tyr | Pro | Asn | Pro | Tyr | His | Gln | Pro | Tyr | Ile | Ser | Arg |
|     | 50  |     |     |     |     | 55  |     |     |     | 60  |     |     |     |     |     |
| Lys | Tyr | Phe | Ala | Thr | Arg | Pro | Gly | Ala | Ile | Glu | Thr | Ala | Met | Glu | Asp |
| 65  |     |     |     |     | 70  |     |     |     |     | 75  |     |     |     | 80  |     |
| Leu | Lys | Gly | His | Val | Ala | Glu | Thr | Ser | Gly | Glu | Thr | Ile | Gln | Gly | Phe |
|     |     |     | 85  |     |     |     |     |     | 90  |     |     |     | 95  |     |     |
| Trp | Leu | Leu | Thr | Lys | Ile | Asp | His | Trp | Asn | Asn | Glu | Lys | Glu | Arg | Ile |
|     |     |     | 100 |     |     |     |     |     | 105 |     |     |     | 110 |     |     |
| Leu | Leu | Val | Thr | Asp | Lys | Thr | Leu | Leu | Ile | Cys | Lys | Tyr | Asp | Phe | Ile |
|     |     | 115 |     |     |     |     |     |     | 120 |     |     |     | 125 |     |     |
| Met | Leu | Ser | Cys | Val | Gln | Leu | Gln | Arg | Ile | Pro | Leu | Ser | Ala | Val | Tyr |
|     | 130 |     |     |     |     |     | 135 |     |     |     |     | 140 |     |     |     |
| Arg | Ile | Cys | Leu | Gly | Lys | Phe | Thr | Phe | Pro | Gly | Met | Ser | Leu | Asp | Lys |
| 145 |     |     |     |     | 150 |     |     |     |     | 155 |     |     |     | 160 |     |
| Arg | Gln | Gly | Glu | Gly | Leu | Arg | Ile | Tyr | Trp | Gly | Ser | Pro | Glu | Glu | Gln |
|     |     |     | 165 |     |     |     |     |     | 170 |     |     |     | 175 |     |     |
| Ser | Leu | Leu | Ser | Arg | Trp | Asn | Pro | Trp | Ser | Thr | Glu | Val | Pro | Tyr | Ala |
|     |     | 180 |     |     |     |     |     |     | 185 |     |     |     | 190 |     |     |
| Thr | Phe | Thr | Glu | His | Pro | Met | Lys | Tyr | Thr | Ser | Glu | Lys | Phe | Leu | Glu |
|     |     | 195 |     |     |     |     | 200 |     |     |     |     | 205 |     |     |     |
| Ile | Cys | Lys | Leu | Ser | Gly | Phe | Met | Ser | Lys | Leu | Val | Pro | Ala | Ile | Gln |
|     | 210 |     |     |     |     |     | 215 |     |     |     |     | 220 |     |     |     |

<210> 2441

<211> 248

<212> PRT

<213> Homo sapiens

<400> 2441

出証特 2 0 0 4 - 3 0 5 9 6 6 0

100 105 110  
Phe Gly Ala Cys Pro Gly Pro Glu Ala Pro Asn Pro Val Pro Leu Cys  
115 120 125  
Leu Met Asn His Thr Lys Gly Lys Ile Met Val Val Trp Thr Arg Arg  
130 135 140  
Ser Asp Cys Pro Phe Trp Val Thr Pro Glu Ser Cys Asp Val Pro Pro  
145 150 155 160  
Leu Lys Ser Met Ala Met Arg Leu His Phe Gln Pro Pro His Pro Asn  
165 170 175  
Cys Leu Tyr Thr Val Glu Leu Glu Ala Phe Ala Ile Tyr Lys Val Cys  
180 185 190  
Ala Arg Asn Glu Arg Glu Glu Cys Gly Val Ser Ala Arg Ser Leu Ser  
195 200 205  
Gly Leu Val Gly Trp Gln Glu Val Thr Glu Gly Ser Phe Arg Leu His  
210 215 220  
Pro Leu Arg Ala Arg Leu Ser Leu Gly Trp Thr Val Thr Pro Met Ser  
225 230 235 240  
Leu Ser Pro Pro Lys Leu Leu Ala  
245

&lt;210&gt; 2442

&lt;211&gt; 112

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2442

Met Ala Lys Trp Gly Cys Glu Pro Leu Ala Gln Arg Leu His Pro Arg  
1 5 10 15

Leu Glu Val Ile Leu His Val Pro Lys Gln Ala Met Pro Arg Ser Ala  
                     20                    25                    30  
 Lys Lys Ser Gly Gln Pro Gly His Glu Cys Thr Pro Arg Ser Pro Gly  
                     35                    40                    45  
 Asn Phe Ile Gln Asp Thr Thr Gln Pro Val Leu Gln Pro Ala Gly His  
                     50                    55                    60  
 Arg Leu Pro Gln Leu Ser Arg Ala Thr Thr Thr Leu Thr Glu Val Ser  
                     65                    70                    75                    80  
 Gln Glu Ala Thr Leu Asp Thr Gly Arg Gln Gln Gly Met Glu Arg Gly  
                                     85                    90                    95  
 Lys Lys Gly Gly Lys Thr Pro Ser Cys Gly Arg Val Ala Lys Asp Gly  
                     100                    105                    110

&lt;210&gt; 2443

&lt;211&gt; 110

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2443

Met Gly Val Glu Glu Phe Gly Val Asn Leu Tyr Ile Leu Gln Ile Ile  
           1                    5                    10                    15  
 Phe Gly Gly Val Asp Val Pro Ala Lys Phe Ile Thr Ile Leu Ser Leu  
                     20                    25                    30  
 Ser Tyr Leu Gly Arg His Thr Thr Gln Ala Ala Ala Leu Leu Leu Ala  
                     35                    40                    45  
 Gly Gly Ala Ile Leu Ala Leu Thr Phe Val Pro Leu Gly Glu Arg Leu  
                     50                    55                    60  
 Gly Leu Pro Gln Asn Pro Leu Glu Glu Ala Ala Arg Leu Gly Ala Arg

|   |     |     |    |
|---|-----|-----|----|
| 65  | 70  | 75  | 80 |
| Asp Phe Thr Ala Gly Ser Ala Ser Lys Ser Leu Cys Tyr Leu Glu Gln |     |     |    |
|   | 85  | 90  | 95 |
| Val Pro Ala Leu Ser Gly Ala Gln Gly Leu Ser Ser Arg Lys         |     |     |    |
| 100   | 105 | 110 |    |

&lt;210&gt; 2444

&lt;211&gt; 237

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2444

|   |     |     |    |
|---|-----|-----|----|
| Met His Leu Thr Phe Asn Leu Arg Ser Trp Ala Cys Val Glu Leu Val |     |     |    |
| 1   | 5   | 10  | 15 |
| Phe Gly Ala Tyr Lys Ser Glu Ser His Leu Trp Arg Ser Ser Arg Leu |     |     |    |
| 20  | 25  | 30  |    |
| Val Lys Cys Gly Gln Thr Cys Phe Pro Pro Leu Gly Asn Gly Thr Glu |     |     |    |
| 35  | 40  | 45  |    |
| Gln Pro Ile Cys Lys Thr Trp Phe Phe Ser Ile Arg Trp Val Ile Tyr |     |     |    |
| 50  | 55  | 60  |    |
| Met Tyr Val Leu Val Leu Trp Phe Phe Leu Phe Phe Val Leu Phe Cys |     |     |    |
| 65  | 70  | 75  | 80 |
| Phe Val Leu Arg Pro Ser Leu Ala Leu Ser Pro Gly Arg Glu Cys Ser |     |     |    |
| 85  | 90  | 95  |    |
| Gly Ala Ile Pro Ala His Ser His Leu Cys Val Pro Gly Leu Gly Gly |     |     |    |
| 100   | 105 | 110 |    |
| Ser Pro Ala Ser Ala Ser Pro Val Ala Gly Ile Thr Gly Asp Thr Gln |     |     |    |
| 115   | 120 | 125 |    |



Leu Ile Phe Val Phe Leu Val Glu Thr Gly Phe Cys His Val Gly Gln  
 130 135 140  
 Ala Asp Leu Lys Leu Leu Thr Ser Ser Asn Pro Pro Thr Leu Ala Ser  
 145 150 155 160  
 Gln Ser Ala Arg Ile Thr Asp Met Ser His His Ala Trp Pro Thr Met  
 165 170 175  
 Val Tyr Phe Tyr Lys Asn Phe Tyr Ser Glu Lys Met Gly Thr Phe Ser  
 180 185 190  
 Val Val Val Ile Thr Val Ser Cys Arg Leu Cys Val Arg Ser Ala Val  
 195 200 205  
 Glu Pro Val Val Ala Gln Ala Ala Leu Ser Gly Val Ser Glu Leu Phe  
 210 215 220  
 Pro Cys Thr Pro Val Ser Ala Gly Ala Gly Asn Ala Pro  
 225 230 235

&lt;210&gt; 2445

&lt;211&gt; 104

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2445

Met Arg Thr Ala Thr Ser Thr Gly Arg Arg Ile Ser Pro Asn Ser Gln  
 1 5 10 15  
 Val Ser Gly Leu Met Ala Thr Thr Ala Glu Ser Thr Pro Arg Pro Gly  
 20 25 30  
 Ala Ser Ser Cys Leu Ala Gly Val Thr Ala Pro Ser Thr Pro Thr Gly  
 35 40 45  
 Cys Gly Ser Ala Ala Arg Lys Ser Ile Thr Leu Tyr Thr Leu Asn Gly

50                      55                      60  
 Lys Lys Val Glu Val Ala Val Lys Gln Ile Ile Ala Gly Lys Ala Val  
 65                      70                      75                      80  
 Glu Gln Gly Gly Ala Phe Ser Asn Pro Glu Thr Leu Asp Leu Tyr Arg  
                          85                      90                      95  
 Asp Ile Pro Glu Leu Gln Gly Phe  
                          100

<210> 2446

<211> 108

<212> PRT

<213> Homo sapiens

<400> 2446

Met Val His Ile Asn Tyr Met Trp Gly Lys Asn Ala Ile Phe Trp Ala  
 1                      5                      10                      15  
 Arg Glu Thr Lys Gly Phe Ser Ile Tyr Glu Met Pro Gly Cys Gln Phe  
                          20                      25                      30  
 Ser Lys Pro Phe Pro Leu Asp Tyr Ser Gly Pro Arg Pro Phe Ser Asn  
                          35                      40                      45  
 Pro Thr Asn Gln Leu Leu Asp Pro Ala Pro Arg Ser Ser Gly Leu Gly  
                          50                      55                      60  
 Ala Gly Phe Arg Glu Glu Asn Leu Ile Lys Leu Phe Cys Leu Val Leu  
 65                      70                      75                      80  
 Val Thr Ala Val Ala Gly Glu Glu Phe Ile Ile Ile Lys Tyr Ile Phe  
                          85                      90                      95  
 Val Ile Thr Leu Trp Ile Leu Ile Ile His Leu Val  
                          100                      105

&lt;210&gt; 2447

&lt;211&gt; 117

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2447

Met Cys Asn Lys Ala Gly Glu Thr Val Gln His Thr Arg Gly Gln Pro  
1 5 10 15  
Phe Pro Leu Met Val Ala Glu Leu Thr Pro Gly Gly Gly Leu Thr Pro  
20 25 30  
Ala Ala Arg Ala Arg Leu Asp Phe Arg Asn Met Ala Leu Leu Ala Trp  
35 40 45  
Asp Ser Arg Ala Val Glu Ile Pro Val Gly Gly Arg Pro Gly Pro Ser  
50 55 60  
His Gly Leu Gly Ser Arg Lys Pro Arg Phe His Thr Met Glu Arg Gln  
65 70 75 80  
Pro Pro Ala Trp Ala Gly Arg Gly Leu Ser His Leu Leu Leu Ser Ser  
85 90 95  
Ala Gly Leu Arg Arg Ala Glu Leu Pro Gly Ala Gly Val Ala Asn Glu  
100 105 110  
Asp Asn Lys Gln Met  
115

&lt;210&gt; 2448

&lt;211&gt; 132

&lt;212&gt; PRT

<213> Homo sapiens

<400> 2448

Met Pro Cys Ser Ser Arg Leu Leu Met Ala Tyr Ile Glu Asp Thr Gly  
1 5 10 15  
Lys Met Val Val Asp Met Pro Ser Thr Met Thr Ser Lys Pro Gln Tyr  
20 25 30  
Phe His Pro Lys Ser Leu Thr Ser Asp Asn Ser His Ile Pro Leu Leu  
35 40 45  
Leu Pro Asn Trp Lys Ala Asp Cys Pro Val Asn Val Thr Met Ser Leu  
50 55 60  
Lys His Leu Ile Lys Asn Leu Leu Asn Trp Asp Ile Trp Val Gly Lys  
65 70 75 80  
Ile Gly Ile Pro Leu Trp Lys Thr Pro Arg Leu Pro Trp Ser Tyr Thr  
85 90 95  
Asn Trp Leu Asn Ser Ser Gly Lys Asn Thr Leu Pro Arg Ile Pro Arg  
100 105 110  
Lys Thr Gly Asp Asn Gly Asp Val Gly Asp Val Gly Arg Gln Lys Gln  
115 120 125  
His Gln Glu Lys  
130

<210> 2449

<211> 142

<212> PRT

<213> Homo sapiens

<400> 2449

Met Tyr Leu Leu Arg Lys Ser Phe Ala Leu Val Ala Gln Ala Gly Val  
 1 5 10 15  
 Gln Trp His Asp Leu Ser Ser Pro Gln Pro Leu Pro Pro Arg Phe Lys  
 20 25 30  
 Gln Phe Ser Cys Leu Ser Leu Pro Ser Ser Trp Asp Tyr Arg Arg Met  
 35 40 45  
 Pro Pro Arg Pro Ala Asn Phe Phe Val Phe Leu Leu Glu Thr Gly Phe  
 50 55 60  
 Leu His Val Gly Gln Ala Gly Leu Glu Ile Ser Thr Ser Gly Asp Pro  
 65 70 75 80  
 Pro Val Ser Val Ser Gln Ser Ala Gly Ile Thr Asp Val Ser His His  
 85 90 95  
 Ala Arg Pro Asn Ile Phe Cys His Ser Arg Ile Lys Pro Cys Thr Gln  
 100 105 110  
 Asp Ala Gly Arg Pro His Ser Gln Tyr Phe Met His Leu Ala Asp Thr  
 115 120 125  
 Asn Leu Leu Ser Val Cys Met Gly Leu Pro Ile Leu Gly Met  
 130 135 140

&lt;210&gt; 2450

&lt;211&gt; 100

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2450

Met Leu Phe Leu Leu Thr Pro Ser Ser His His Gln His Glu Cys Val  
 1 5 10 15  
 Arg Arg Ala Phe Glu Cys Gly Asp Cys His Ile Leu Leu Asp Asn Asn

20 25 30  
 Val Leu Gly Val Asp Cys His Gly Ala Gly Glu Arg Ala Val His Leu  
 35 40 45  
 Glu Asp His Phe Val His Ile Asp Thr Ile Ser Leu Leu Leu Glu Asp  
 50 55 60  
 Ala Leu Glu Tyr Ser Ala Leu Ile Ala Gly His Pro Lys Ser Asp Leu  
 65 70 75 80  
 Pro Pro Gly Leu Ser Arg Cys Arg Pro Trp Glu His His Trp Pro Ile  
 85 90 95  
 Ser Tyr Thr Gly  
 100

&lt;210&gt; 2451

&lt;211&gt; 110

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2451

Met Phe Val His Leu Cys Gly Asp Ile Cys Asp Ile Leu Leu Thr Cys  
 1 5 10 15  
 Ile Glu Cys Val Met Ile Lys Ser Glu Tyr Leu Gly Tyr Pro Ser Leu  
 20 25 30  
 Arg Val Ser Thr Ile Cys Met Cys Trp Glu His Phe Lys Phe Ser Pro  
 35 40 45  
 Leu Ala Ile Leu Lys Tyr Thr Thr Tyr Cys Glu Leu Glu Ser Pro Tyr  
 50 55 60  
 Ser Ala Ile Gln Tyr Tyr Asn Leu Phe Leu Leu Ser Asp Cys Met Leu  
 65 70 75 80

Tyr Pro Leu Thr Asn Leu Ser Ser Ser Pro Cys Pro Leu Thr Tyr Pro  
                             85                            90                            95  
 Phe Gln Thr Leu Glu Ser Ile Ile Leu Leu Tyr Phe Tyr Phe  
                             100                            105                            110

<210> 2452

<211> 159

<212> PRT

<213> Homo sapiens

<400> 2452

Met Gln Thr Ala Ala His His Arg Gly Val Pro His Gly Cys Leu Ser  
     1                    5                            10                            15  
 Leu Leu Gly Trp Ser Lys Thr Ser His Ser Leu Glu Ala Pro Glu Asp  
                     20                            25                            30  
 Asp Gly Gly Trp Ser Ser Ala Glu Glu Gln Ile Asn Ser Ser Asp Ala  
                     35                            40                            45  
 Glu Glu Asp Gly Gly Leu Gly Pro Lys Lys Leu Val Pro Gly Lys Tyr  
                     50                            55                            60  
 Thr Val Val Ala Asp His Glu Lys Gly Gly Pro Asp Ala Leu Arg Val  
     65                            70                            75                            80  
 Arg Ser Gly Asp Val Val Glu Leu Val Gln Glu Gly Asp Glu Gly Leu  
                             85                            90                            95  
 Trp Tyr Val Arg Asp Pro Thr Thr Gly Lys Glu Gly Trp Val Pro Ala  
                     100                            105                            110  
 Ser Ser Leu Ser Val Arg Leu Gly Pro Ser Gly Ser Ala Gln Cys Leu  
                     115                            120                            125  
 Ser Ser Ser Glu Ser Ser Pro Gly Ser Ala Val Leu Ser Asn Ser Ser

130 135 140  
Ser Cys Ser Glu Gly Gly Gln Ala Pro Phe Ser Asp Leu Gln Gly  
145 150 155

<210> 2453

<211> 104

<212> PRT

<213> Homo sapiens

<400> 2453

Met Phe Thr Gln Thr Gly Ala Leu Glu Leu Arg Thr Arg Val Phe Ser  
1 5 10 15  
Ala Gly Arg Cys Ala Gln Ile Lys Pro Pro Arg Gly Asn Leu His Gly  
20 25 30  
Val Arg Cys Lys Val Thr Pro Phe Asn Ser Arg Tyr Gln Leu His Pro  
35 40 45  
Ser Val Arg Gly Lys Glu Val Arg Tyr Ser Gly Phe Asn Pro Arg Pro  
50 55 60  
Ala Gln Pro Gln His Ala Gln Ser Arg Gly Tyr Leu Gly Thr Gly Arg  
65 70 75 80  
His Leu Thr Pro Ser Leu Thr Gln Pro Gly Phe Gly Ser Ser Gln Pro  
85 90 95  
Ala Ser His Pro Leu Cys Gly Tyr  
100

<210> 2454

<211> 115



<212> PRT

<213> Homo sapiens

<400> 2454

Met Gly Trp Gly Lys Val Ala Arg Phe Arg Arg Arg Glu Arg Lys Asn  
1 5 10 15  
Arg Cys Ser Ser Lys Glu Asp Cys Arg Cys Ser Pro Gly Pro Gly Ser  
20 25 30  
Leu Pro Arg Arg Arg Ala Ala Arg Thr Pro Ala Ser Trp Gln Arg Ser  
35 40 45  
Pro Arg Arg Asn His His Ser Glu Ala Phe Cys Pro Leu Ala Ala Ala  
50 55 60  
Leu Pro Lys Thr Thr Gly Pro Pro Gly Gly Arg Asp Lys Pro Thr Arg  
65 70 75 80  
Ser Leu Val Phe Arg Glu Arg Arg Val Pro Val Ser Leu Arg Glu Met  
85 90 95  
Met Phe Lys Ile Pro Ala Arg Ala Pro Ser Pro Ala Val Lys His Gln  
100 105 110  
Leu Ala Ala  
115

<210> 2455

<211> 128

<212> PRT

<213> Homo sapiens

<400> 2455

Met Pro Ala Leu Gly Pro Leu Leu Arg Leu Glu Leu Met Arg Ala Ala

|   |     |     |    |
|---|-----|-----|----|
| 1   | 5   | 10  | 15 |
| Val Asp Thr Gly Gly Thr Gln Arg Pro Ala Ala Cys Glu Ser Ser Arg |     |     |    |
| 20  | 25  | 30  |    |
| Gly Gln Ser Trp Glu Pro Gly Ala Gly Thr Arg Gln Val Ser Asp Cys |     |     |    |
| 35  | 40  | 45  |    |
| Glu Met Pro Ala Ala Ser Pro Arg Lys Ala Ala Cys Ser Ile Trp Lys |     |     |    |
| 50  | 55  | 60  |    |
| Leu Leu Cys Ser Pro Trp Pro Leu Cys Ser Ser Ser Pro Gly Leu Gly |     |     |    |
| 65  | 70  | 75  | 80 |
| Ser Thr Arg Val Pro Leu Cys Leu Ser Arg Ala His Ser Pro Thr Ala |     |     |    |
| 85  | 90  | 95  |    |
| Pro Ala Cys Thr Val Met Thr Ser Gly Arg Trp Val Pro Ala Pro Ser |     |     |    |
| 100   | 105 | 110 |    |
| Arg Pro Arg Pro Pro Ser Leu Leu Pro Ala Ser Cys Pro Ala Asp Pro |     |     |    |
| 115   | 120 | 125 |    |

&lt;210&gt; 2456

&lt;211&gt; 160

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2456

|   |    |    |    |
|---|----|----|----|
| Met Cys Trp Leu Phe Phe Leu Arg Trp Ser Pro Thr Val Ser Ser Arg |    |    |    |
| 1   | 5  | 10 | 15 |
| Leu Glu Cys Ser Gly Val Ile Leu Ala His Arg Asn Leu Ser Leu Pro |    |    |    |
| 20  | 25 | 30 |    |
| Gly Ser Ser Asn Ser Cys Ala Ser Ala Ser Arg Val Ala Gly Thr Thr |    |    |    |
| 35  | 40 | 45 |    |

Gly Thr His Asn His Ala Trp Leu Ile Phe Val Phe Leu Val Glu Thr  
 50 55 60  
 Gly Phe Cys His Val Ala Gln Ala Gly Leu Glu Leu Leu Ala Ser Ser  
 65 70 75 80  
 Asp Pro Pro Ala Ser Ala Ser Gln Lys Tyr Trp Asp Tyr Arg His Glu  
 85 90 95  
 Pro Pro Arg Pro Ala Trp Pro Phe Asp Phe Ile Phe Ile Ser Ser Trp  
 100 105 110  
 Pro Gln Asn Ser Cys Trp Ile Leu Gln Thr Leu His Leu Tyr Gln Gly  
 115 120 125  
 Arg Lys Lys Arg Asp Arg Ala Glu Phe Val Asn Cys Leu Cys Arg Phe  
 130 135 140  
 Tyr Gln Glu Lys Lys Ser Val Pro Arg Arg Leu Pro Thr Asp Phe Leu  
 145 150 155 160

<210> 2457

<211> 204

<212> PRT

<213> Homo sapiens

<400> 2457

Met Asp Ser Asp Ser Gly Glu Gln Ser Glu Gly Glu Pro Val Thr Ala  
 1 5 10 15  
 Ala Gly Pro Asp Val Phe Ser Ser Lys Ser Leu Ala Leu Gln Ala Gln  
 20 25 30  
 Lys Lys Ile Leu Ser Lys Ile Ala Ser Lys Thr Val Ala Asn Met Leu  
 35 40 45  
 Ile Asp Asp Thr Ser Ser Glu Ile Phe Asp Glu Leu Tyr Lys Val Thr

出証特 2 0 0 4 - 3 0 5 9 6 6 0

Pro Ser Leu Arg Pro Ser Gly Pro Leu Val Lys Leu His Gln Gly Cys  
                   20                                  25                                  30  
 Phe Leu Leu Gly Cys Val Ser Gly Arg Gln Leu Arg Leu Val Gly Asp  
                   35                                  40                                  45  
 Asn Leu Cys Trp Glu Val Thr Leu Leu Pro Arg Lys Phe Trp Asn Pro  
                   50                                  55                                  60  
 Gln Pro Gly Ala Gly Thr Gly Ala Ser Ser Leu Ala Glu Ser Gln Val  
                   65                                  70                                  75                                  80  
 Thr Arg Gly Pro His Val Ser Gly Phe Thr Phe Pro Tyr Phe Ile His  
                                   85                                  90                                  95  
 Ser Leu Thr Gln Ser Leu Arg Ile Thr Glu Glu His Trp Ala Glu His  
                   100                                  105                                  110  
 Met Thr Gly Ser Leu Glu Pro Arg Gly Leu Gln Arg Gly Leu Arg Arg  
                   115                                  120                                  125  
 Val Val Arg Val Thr Thr Val Gly Ser Leu Pro Ser Gln Lys Val Asp  
                   130                                  135                                  140  
 Arg Ala Tyr Pro Gly Gly Gly Asp His Pro Ala Ile Arg Cys Leu Arg  
                   145                                  150                                  155                                  160  
 Gln Gly Leu Gly Gln Leu Arg Gln Ala Val Phe Phe Phe Pro Phe Leu  
                                   165                                  170                                  175  
 Phe Asn Arg Cys Asn Ile Phe Ile Ile Ile Leu Glu Thr Phe Phe Leu  
                   180                                  185                                  190  
 Pro Lys Ile Thr Asp Gln Lys Lys Phe His Leu Lys Tyr His Ala Gln  
                   195                                  200                                  205  
 Glu Ser Thr Trp Asp Gln Lys  
                   210                                  215

&lt;210&gt; 2459

&lt;211&gt; 718

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2459

Met Asp Leu Gly Lys Val Arg Arg Ala Lys Ala Ile Leu Ser His Leu

1 5 10 15

Val Lys Cys Ile Ala Gly Glu Val Ala Ile Val Arg Asp Pro Asp Ala

20 25 30

Gly Glu Gly Thr Lys Arg His Leu Ser Arg Thr Ile Ser Val Ser Gly

35 40 45

Ser Thr Ala Lys Glu Thr Val Thr Val Gly Lys Asp Gly Thr Arg Asp

50 55 60

Tyr Thr Glu Ile Asp Ser Ile Pro Pro Leu Pro Leu Tyr Ala Leu Leu

65 70 75 80

Ala Ala Asp Gln Asp Thr Ser Tyr Arg Ile Ser Glu Glu Ser Thr Lys

85 90 95

Ile Pro Gln Ser Tyr Glu Asp Gln Thr Val Ser Gln Pro Glu Asp Gln

100 105 110

Tyr Ser Glu Leu Phe Gln Ile Gln Asp Ile Pro Thr Asp Asp Ile Asp

115 120 125

Leu Glu Pro Glu Lys Arg Glu Asn Lys Ser Lys Val Ile Asn Leu Ser

130 135 140

Gln Tyr Gly Pro Ala Tyr Phe Gly Gln Glu His Ala Arg Val Leu Ser

145 150 155 160

Ser His Leu Met His Ser Ser Leu Pro Gly Leu Thr Arg Leu Glu Gln

165 170 175

Met Phe Leu Val Ala Leu Ala Asp Thr Val Ala Thr Thr Ser Thr Glu

180 185 190

Leu Asp Glu Ser Arg Asp Lys Ser Cys Ser Gly Arg Asp Thr Leu Asp  
 195 200 205  
 Glu Cys Gly Leu Arg Tyr Leu Leu Ala Met Arg Leu His Thr Cys Leu  
 210 215 220  
 Leu Thr Ser Leu Pro Pro Leu Tyr Arg Val Gln Leu Leu His Gln Gly  
 225 230 235 240  
 Val Ser Thr Cys His Phe Ala Trp Ala Phe His Ser Glu Ala Glu Glu  
 245 250 255  
 Glu Leu Ile Asn Met Ile Pro Ala Ile Gln Arg Gly Asp Pro Gln Trp  
 260 265 270  
 Ser Glu Leu Arg Ala Met Gly Ile Gly Trp Trp Val Arg Asn Ile Asn  
 275 280 285  
 Thr Leu Arg Arg Cys Ile Glu Lys Val Ala Lys Ala Ser Phe Gln Arg  
 290 295 300  
 Asn Asn Asp Ala Leu Asp Ala Ala Leu Phe Tyr Leu Ser Met Lys Lys  
 305 310 315 320  
 Lys Ala Val Val Trp Gly Leu Phe Arg Ser Gln His Asp Glu Lys Met  
 325 330 335  
 Thr Thr Phe Phe Ser His Asn Phe Asn Glu Asp Arg Trp Arg Lys Ala  
 340 345 350  
 Ala Leu Lys Asn Ala Phe Ser Leu Leu Gly Lys Gln Arg Phe Glu Gln  
 355 360 365  
 Ser Ala Ala Phe Phe Leu Leu Ala Gly Ser Leu Lys Asp Ala Ile Glu  
 370 375 380  
 Val Cys Leu Glu Lys Met Glu Asp Ile Gln Leu Ala Met Val Ile Ala  
 385 390 395 400  
 Arg Leu Tyr Glu Ser Glu Phe Glu Thr Ser Ser Thr Tyr Ile Ser Ile  
 405 410 415  
 Leu Asn Gln Lys Ile Leu Gly Cys Gln Lys Asp Gly Ser Gly Phe Ser

420 425 430  
Cys Lys Arg Leu His Pro Asp Pro Phe Leu Arg Ser Leu Ala Tyr Trp  
435 440 445  
Val Met Lys Asp Tyr Thr Arg Ala Leu Ala Thr Leu Leu Glu Gln Thr  
450 455 460  
Pro Lys Glu Asp Asp Glu His Gln Val Ile Ile Lys Ser Cys Asn Pro  
465 470 475 480  
Val Ala Phe Ser Phe Tyr Asn Tyr Leu Arg Thr His Pro Leu Leu Ile  
485 490 495  
Arg Arg Asn Leu Ala Ser Pro Glu Gly Thr Leu Ala Thr Leu Gly Leu  
500 505 510  
Lys Thr Glu Lys Asn Phe Val Asp Lys Ile Asn Leu Ile Glu Arg Lys  
515 520 525  
Leu Phe Phe Thr Thr Ala Asn Ala His Phe Lys Val Gly Cys Pro Val  
530 535 540  
Leu Ala Leu Glu Val Leu Ser Lys Ile Pro Lys Val Thr Lys Thr Ser  
545 550 555 560  
Ala Leu Ser Ala Lys Lys Asp Gln Pro Asp Phe Ile Ser His Arg Met  
565 570 575  
Asp Asp Val Pro Ser His Ser Lys Ala Leu Ser Asp Gly Asn Gly Ser  
580 585 590  
Ser Gly Ile Glu Trp Ser Asn Val Thr Ser Ser Gln Tyr Asp Trp Ser  
595 600 605  
Gln Pro Ile Val Lys Val Asp Glu Glu Pro Leu Asn Leu Asp Trp Gly  
610 615 620  
Glu Asp His Asp Ser Ala Leu Asp Glu Glu Glu Asp Asp Ala Val Gly  
625 630 635 640  
Leu Val Met Lys Ser Thr Asp Ala Arg Glu Lys Asp Lys Gln Ser Asp  
645 650 655



Gln Lys Ala Ser Asp Pro Asn Met Leu Leu Thr Pro Gln Glu Glu Asp  
 660 665 670  
 Asp Pro Glu Gly Asp Thr Glu Val Asp Val Ile Ala Glu Gln Leu Lys  
 675 680 685  
 Phe Arg Ala Cys Leu Lys Ile Leu Met Thr Glu Leu Arg Thr Leu Ala  
 690 695 700  
 Thr Gly Tyr Glu Val Asp Gly Gly Lys Leu Ile His Leu Leu  
 705 710 715

<210> 2460

<211> 161

<212> PRT

<213> Homo sapiens

<400> 2460

Met Glu Thr Lys Lys Asp His Pro Tyr Thr Trp Arg Ile Glu Leu Ala  
 1 5 10 15  
 Lys Thr Glu Lys Tyr Trp Asp Gly Trp Phe Arg Gly Leu Ser Asn Leu  
 20 25 30  
 Phe Leu Ser Cys Pro Ile Pro Lys Leu Leu Leu Leu Ala Gly Val Asp  
 35 40 45  
 Arg Leu Asp Lys Asp Leu Thr Ile Gly Gln Met Gln Gly Lys Phe Gln  
 50 55 60  
 Met Gln Val Leu Pro Gln Cys Gly His Ala Val His Glu Asp Ala Pro  
 65 70 75 80  
 Asp Lys Val Ser Leu Val Leu Ser Asp Cys Lys Arg Thr Thr Val Arg  
 85 90 95  
 Ile Thr Leu Asp Val Thr Glu Asp Lys Ser Leu Ser Leu Ser Leu His

100 105 110  
 Cys Leu Gln Gln Leu Leu Trp Ser Leu Cys Arg Cys Ser Ser Thr Ser  
 115 120 125  
 Ser Pro Thr Ser Pro Trp Gln Leu Leu Met Val Leu Val Leu Cys Ile  
 130 135 140  
 Cys Ala Glu Glu Leu Leu Thr Leu Cys Tyr Phe Ile Pro Gly Pro Cys  
 145 150 155 160  
 Gly

<210> 2461

<211> 109

<212> PRT

<213> Homo sapiens

<400> 2461

Met Thr Lys Pro Trp Ile Arg Ser His Glu Thr Arg Ile Gln Glu Ser  
 1 5 10 15  
 Leu Ser Gln Phe Gly His Lys Gln Val Met Ile Asn Pro Gly Pro Thr  
 20 25 30  
 Thr Ser Leu Gly Asn Thr Thr Ile Ser Gln Ser Ala Lys Thr Glu Pro  
 35 40 45  
 Glu Arg Glu Thr Leu Gln Val Gln Glu Glu Arg Phe Gln Leu Leu Leu  
 50 55 60  
 Leu Ser Val Ala Ser Pro Asn Val Thr Thr Phe Ser Glu Gln Gly Leu  
 65 70 75 80  
 Val Thr Thr Thr Lys His Cys Ser Gly Thr Ala Glu Pro Leu Ala Trp  
 85 90 95

His Val Val Thr His Ser Gln His Asn Ser Leu Thr Phe

100

105

<210> 2462

<211> 329

<212> PRT

<213> Homo sapiens

<400> 2462

Met His Gln Gly Leu Lys Asp Val Gly Ala Lys Val Thr Gly Phe Ser

1

5

10

15

Glu Gly Val Val Asp Ser Val Lys Gly Gly Phe Ser Ser Phe Ser Gln

20

25

30

Ala Thr His Ser Ala Ala Gly Ala Val Val Ser Lys Pro Arg Glu Ile

35

40

45

Ala Ser Leu Ile Arg Asn Lys Phe Gly Ser Ala Asp Asn Ile Pro Asn

50

55

60

Leu Lys Asp Ser Leu Glu Glu Gly Gln Val Asp Asp Ala Gly Lys Ala

65

70

75

80

Leu Gly Val Ile Ser Asn Phe Gln Ser Ser Pro Lys Tyr Gly Ser Glu

85

90

95

Glu Asp Cys Ser Ser Ala Thr Ser Gly Ser Val Gly Ala Asn Ser Thr

100

105

110

Thr Gly Gly Ile Ala Val Gly Ala Ser Ser Ser Lys Thr Asn Thr Leu

115

120

125

Asp Met Gln Ser Ser Gly Phe Asp Ala Leu Leu His Glu Ile Gln Glu

130

135

140

Ile Arg Glu Thr Gln Ala Arg Leu Glu Glu Ser Phe Glu Thr Leu Lys

145                      150                      155                      160  
 Glu His Tyr Gln Arg Asp Tyr Ser Leu Ile Met Gln Thr Leu Gln Glu  
                          165                      170                      175  
 Glu Arg Tyr Arg Cys Glu Arg Leu Glu Glu Gln Leu Asn Asp Leu Thr  
                          180                      185                      190  
 Glu Leu His Gln Asn Glu Ile Leu Asn Leu Lys Gln Glu Leu Ala Ser  
                          195                      200                      205  
 Met Glu Glu Lys Ile Ala Tyr Gln Ser Tyr Glu Arg Ala Arg Asp Ile  
                          210                      215                      220  
 Gln Glu Ala Leu Glu Ala Cys Gln Thr Arg Ile Ser Lys Met Glu Leu  
 225                      230                      235                      240  
 Gln Gln Gln Gln Gln Gln Val Val Gln Leu Glu Gly Leu Glu Asn Ala  
                          245                      250                      255  
 Thr Ala Arg Asn Leu Leu Gly Lys Leu Ile Asn Ile Leu Leu Ala Val  
                          260                      265                      270  
 Met Ala Val Leu Leu Val Phe Val Ser Thr Val Ala Asn Cys Val Val  
                          275                      280                      285  
 Pro Leu Met Lys Thr Arg Asn Arg Thr Phe Ser Thr Leu Phe Leu Val  
                          290                      295                      300  
 Val Phe Ile Ala Phe Leu Trp Lys His Trp Asp Ala Leu Phe Ser Tyr  
 305                      310                      315                      320  
 Val Glu Arg Phe Phe Ser Ser Pro Arg  
                          325

&lt;210&gt; 2463

&lt;211&gt; 105

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2463

Met Val Ser Thr Thr Ser Phe Ile Ala Cys Phe Leu Ile Trp Pro Pro  
 1 5 10 15  
 Ala Arg Leu Val Met Glu Gly Val His Ser Pro Gly Ser Val Ile Val  
 20 25 30  
 Pro Ile Leu Tyr Glu Ala Cys Leu Trp Ser Gly Pro Leu Thr Val Phe  
 35 40 45  
 Ile Leu Leu Asp Pro Tyr Ser Pro Ile Arg Gln Val Leu Pro Leu Arg  
 50 55 60  
 Ile Lys Asn Lys Val Ser Glu Glu Glu Val Gly Lys Tyr Thr Ile Val  
 65 70 75 80  
 Gly Ile Cys Ala Lys Arg Ser His Glu Lys Arg Phe Leu His Gln Pro  
 85 90 95  
 Arg Lys Val Glu Met Ser Ala Leu Arg  
 100 105

&lt;210&gt; 2464

&lt;211&gt; 210

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2464

Met Leu Leu Leu Pro Pro Ser Cys Glu Ala Val Ala Pro Arg Gly Trp  
 1 5 10 15  
 Arg Arg Ser Cys Ser Cys Pro Glu Cys Cys Arg Val Cys Ser Ser Pro  
 20 25 30  
 Val Arg Leu Gln Arg His Arg Ala Leu Leu Ser Thr Pro Glu Ser Phe

35 40 45  
Ala Cys Ala Ala Ser Ala Arg Ala Ser Ser Ala Pro Gly Pro Gly Ala  
50 55 60  
Ala Arg Glu Pro Ala Ser Gly Phe Gln Trp Ala Pro Trp Ala Val Pro  
65 70 75 80  
Ala Phe Pro Thr Ser Ala Ser Gly Lys Ala Trp Pro Ser Leu Arg Phe  
85 90 95  
Gly Val Ala Thr Cys Leu Leu Gly Ile Ser His Leu Pro Thr Cys Ala  
100 105 110  
Cys Ser Arg Leu Ala Leu Cys Gly Pro Arg Phe Pro His Val Pro Arg  
115 120 125  
Gly Lys Asn Ile Pro Ser Pro Thr Ile Trp Gln Arg Leu Ala Phe Ser  
130 135 140  
Gly Pro Arg Pro Pro His Leu Leu Gly Gly Glu Ser Arg Pro Gly His  
145 150 155 160  
Ile Gly Ala Asn Gly Trp Ser Leu Asp Leu Gly Leu His Ile Cys Ser  
165 170 175  
Ala Gly Arg Asn Ile Pro Ser Pro Ala Leu Tyr Leu Gly Gly Trp Pro  
180 185 190  
Arg Pro Ser Arg Gln Arg Arg Pro Ser Gly Lys Arg Thr Asn Pro Cys  
195 200 205  
Gly Pro  
210

&lt;210&gt; 2465

&lt;211&gt; 104

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2465

Met Leu Pro Ser Pro Pro Thr Asp Val Ile Ser Phe Tyr Ile Arg Asp  
 1 5 10 15  
 Ser Ser Glu Pro Thr Pro Leu Arg Ile Tyr Thr Leu Val Phe Val Leu  
 20 25 30  
 Leu Leu Ser Leu Gly Trp Pro Val Thr Leu Ile Ser Ala Met Gln Lys  
 35 40 45  
 Trp Phe Ser Ala Ser Ser Lys Thr Thr Lys Arg Lys Lys Ser Ser Thr  
 50 55 60  
 Phe Gln Tyr Pro Ser Arg His Gln Ala Pro Ala Val Ser Pro Ala Ser  
 65 70 75 80  
 Arg Pro Arg Val Thr Thr Thr Asn Pro Ala Glu Pro Thr Ser Ala Ser  
 85 90 95  
 Gln Pro Trp Leu Gln Asn His Glu  
 100

&lt;210&gt; 2466

&lt;211&gt; 100

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2466

Met Val Val Ser Trp Leu Leu Glu Thr Arg His Asn Gln Glu Gly Glu  
 1 5 10 15  
 Gly Ile Asn Leu Gly Trp Ala Gly Ala Glu Thr His Gly Met Thr Pro  
 20 25 30  
 Ile Leu Ser Pro Gln Ala Arg Pro Pro Arg His Pro Gln Asp His Thr

35                      40                      45  
 Gly Glu Ser His Pro His Gly Leu Asp Trp Ser Trp Gly Pro Pro Val  
 50                      55                      60  
 Val Leu Leu Thr Gly Val Gln Cys Ser Arg Ala Ala Gln Arg Gly Ala  
 65                      70                      75                      80  
 Arg Lys Gly Pro Ser Pro Ser Pro Ala Ile Pro Ile Ser Ala Ser Leu  
 85                      90                      95  
 Ala Leu Val Pro  
 100

<210> 2467

<211> 133

<212> PRT

<213> Homo sapiens

<400> 2467

Met Thr Lys Val Ser Ser Ser Leu Gln Ser His Pro Phe Gln Leu Gly  
 1                      5                      10                      15  
 Gly Pro Arg Leu His Cys Asn Ser Asn Ser Gln Ile Ser Val Asp Val  
 20                      25                      30  
 Lys Glu Gln Ile Ala Met His Val His Pro Thr Gly Val Glu Gly Phe  
 35                      40                      45  
 Tyr Ser Leu Thr Pro Ser Leu His Met Ser Leu Leu His Leu Leu Lys  
 50                      55                      60  
 Val Phe Gly Ser Glu Leu Ala Thr Trp Pro His Pro Thr Ser Arg Arg  
 65                      70                      75                      80  
 Glu Asn Met Pro Ala Tyr His Val Pro Arg Arg Thr Asn Gln Asn Ile  
 85                      90                      95



Cys Glu Leu Pro His Leu Met Thr Pro Cys His Thr Leu Leu Ser Ser  
                     100                    105                    110  
 Ser Glu Phe Leu Leu His Ser Ser Ile Pro Tyr Gln Asp Arg Ser Leu  
                     115                    120                    125  
 His Cys Val Arg Phe  
                     130

<210> 2468

<211> 269

<212> PRT

<213> Homo sapiens

<400> 2468

Met Pro Phe Met Asp Glu Ser Ser Gly Ser Asp Asp Asp Cys Ser Ser  
           1                    5                    10                    15  
 Gln Ala Ser Phe Arg Ile Ser Val Pro Ser Ser Glu Ser Arg Lys Thr  
                     20                    25                    30  
 Ser Gly Leu Gly Ser Pro Arg Ala Ile Lys Arg Gly Val Ser Met Ser  
                     35                    40                    45  
 Ser Leu Ser Ser Glu Gly Asp Tyr Ala Ile Pro Pro Asp Ala Cys Ser  
           50                    55                    60  
 Leu Asp Ser Asp Tyr Ser Glu Pro Glu His Lys Leu Gln Arg Thr Ser  
           65                    70                    75                    80  
 Ser Tyr Ser Thr Asp Gly Leu Gly Leu Gly Gly Glu Ser Leu Glu Lys  
                     85                    90                    95  
 Ser Gly Tyr Leu Leu Lys Met Gly Ser Gln Val Lys Thr Trp Lys Arg  
           100                    105                    110  
 Arg Trp Phe Val Leu Arg Gln Gly Gln Ile Met Tyr Tyr Lys Ser Pro

|   |     |     |     |
|---|-----|-----|-----|
| 115   | 120 | 125 |     |
| Ser Asp Val Ile Arg Lys Pro Gln Gly Gln Val Asp Leu Asn Ser Arg |     |     |     |
| 130   | 135 | 140 |     |
| Cys Gln Ile Val Arg Gly Glu Gly Ser Gln Thr Phe Gln Leu Ile Ser |     |     |     |
| 145   | 150 | 155 | 160 |
| Glu Lys Lys Thr Tyr Tyr Leu Thr Ala Asp Ser Pro Ser Leu Leu Glu |     |     |     |
| 165   | 170 | 175 |     |
| Glu Trp Ile Arg Val Leu Gln Ser Leu Leu Lys Val Gln Ala Thr Gly |     |     |     |
| 180   | 185 | 190 |     |
| Pro Pro Ala Leu Leu Arg Gly Gly Thr Lys Pro Thr Val Lys Gly Trp |     |     |     |
| 195   | 200 | 205 |     |
| Leu Thr Lys Val Lys His Gly His Ser Lys Val Val Trp Cys Ala Leu |     |     |     |
| 210   | 215 | 220 |     |
| Val Gly Lys Ile Phe Tyr Tyr Tyr Arg Ser His Glu Asp Lys Val Leu |     |     |     |
| 225   | 230 | 235 | 240 |
| Leu Ser Leu Leu Thr Ile Pro Thr Leu Leu Leu Pro Pro Lys His Met |     |     |     |
| 245   | 250 | 255 |     |
| Thr Ala Thr Leu Cys Pro Asp Glu Ser Pro Tyr Pro Thr             |     |     |     |
| 260   | 265 |     |     |

&lt;210&gt; 2469

&lt;211&gt; 132

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2469

|   |   |    |    |
|---|---|----|----|
| Met Lys Arg Ser Cys Cys Gly Arg Asn Leu Ser His Gln Asn His Ser |   |    |    |
| 1   | 5 | 10 | 15 |

Ala Ile Ile Leu Pro Cys Gly Gly Thr Gly Gly Arg Tyr Ser Val Leu  
20 25 30  
Leu Thr Ala Val His Phe Arg Gly Leu Thr Met Glu Gln Thr Ala Trp  
35 40 45  
Val Leu Asp Leu Asp Thr Gly Glu Ala Val Leu Gln Tyr Arg Ser Leu  
50 55 60  
Pro Arg Gly Ala His Lys Thr Leu Gly Lys Lys Arg Lys Ile Ser Ser  
65 70 75 80  
Tyr Asn Val Asn Leu Thr Ser Cys Gln Leu Ala Lys Glu Lys Cys Leu  
85 90 95  
Lys Gly Pro Ser Ser Phe Leu Gln Ser Arg His Glu Arg Leu Asn Ser  
100 105 110  
Glu Leu Arg Asp Asn Lys Trp Thr Thr Gly Thr Phe Gly Gln Thr Cys  
115 120 125  
Asn Phe Ile Ser  
130

&lt;210&gt; 2470

&lt;211&gt; 148

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2470

Met Gly Leu Arg Pro Pro Gly Asn Asn His Arg Ala Cys Ser Ser Ala  
1 5 10 15  
Pro Ala Ser Pro Glu Ser His Pro Arg Asp Gln Pro His Pro Gln His  
20 25 30  
Asn Cys Pro Ala Gly Glu Ala Pro Trp Ala Trp Arg Gly Phe Pro Asp

35                      40                      45  
 Thr Ala His Pro Gly Pro Ala Ser Ser Thr Lys Thr Glu Thr Leu Ala  
 50                      55                      60  
 Thr His Gly Gly Trp Gly Pro Gly Val Leu Arg Arg Gly Tyr Pro Gly  
 65                      70                      75                      80  
 Pro Arg Pro Glu Ile His Gln Leu His Pro Arg Gly Gly Thr Ala Asp  
 85                      90                      95  
 Gly Ser Gln His Gln Gln Asp Pro Arg Ala Pro Arg Thr Glu Val Cys  
 100                      105                      110  
 Pro Thr His Phe Leu Pro Thr Thr Cys Ala Pro Glu Ser Arg Ala Cys  
 115                      120                      125  
 Pro Gly Arg Trp Arg Pro Gly Val Glu Cys Thr Cys Ser His Glu Val  
 130                      135                      140  
 Leu Gly Val Phe  
 145

<210> 2471

<211> 117

<212> PRT

<213> Homo sapiens

<400> 2471

Met Ala Lys Thr Glu Ile Glu Leu Gln Tyr Arg Ala Phe Pro Leu Leu  
 1                      5                      10                      15  
 Gly Leu Lys Ser Arg Cys Leu Trp Lys Gly His Thr Phe Asp Ser Leu  
 20                      25                      30  
 Asp Ser Gly Glu Val Thr Lys Val Pro Arg Lys Trp Glu His Lys Trp  
 35                      40                      45

Glu Leu Leu Glu Val Ser Gly Val Pro Gly Gly Pro Ser Thr Glu Ser  
 50 55 60  
 Gly Val Leu Asn His Gln Ser Glu Leu Pro Glu Cys Gln Arg Glu Leu  
 65 70 75 80  
 Val Val Ala Gly His Cys Trp Asn Arg Asn Leu Glu Lys Gln Pro Ser  
 85 90 95  
 Arg Ser Pro Ala Cys Leu Gln Asp Gly Pro Gly Ile Leu Gly Leu Lys  
 100 105 110  
 Arg Cys Gly Glu Gln  
 115

<210> 2472

<211> 107

<212> PRT

<213> Homo sapiens

<400> 2472

Met Pro Leu Gly Cys Arg Glu Glu Ala Gly Gly Val Met Gly Met Gly  
 1 5 10 15  
 Ser Gly Arg Gly Arg Glu Gly Pro Ser Thr Lys Ala Trp Glu Met Arg  
 20 25 30  
 Gly Gly Gly Gly Arg Ala Gly Glu Ala Lys Ser Gln Pro Trp Arg Glu  
 35 40 45  
 His Pro Gly Ala Ser Val Ser Gly Tyr Thr Gln His Phe Ala Thr Cys  
 50 55 60  
 Gly Pro Ala Gly Ala Glu Asp Gly Gly Glu Glu Ala Ser Ser Pro Cys  
 65 70 75 80  
 Val Tyr Cys Arg Gln Lys Gly Leu Val Phe Trp Phe Trp Gly Phe Cys

|   |     |    |    |
|---|-----|----|----|
|   | 85  | 90 | 95 |
| Phe Val Cys Val Leu Phe Gly Leu Phe Val Phe |     |    |    |
| 100   | 105 |    |    |

&lt;210&gt; 2473

&lt;211&gt; 102

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2473

|   |    |    |    |
|---|----|----|----|
| Met Arg Arg Val Gly Asp Glu Asn Phe Trp Pro Pro Cys Ser Gly Leu |    |    |    |
| 1   | 5  | 10 | 15 |
| Leu Phe Lys His Leu Lys Ile Ser Arg Ser Phe Thr Leu Gly Gln Met |    |    |    |
| 20  | 25 | 30 |    |
| Thr Ser Ala Gly Ile Leu Leu Cys Pro Cys Cys Ala Lys Arg Glu Ser |    |    |    |
| 35  | 40 | 45 |    |
| Ile Ser Ser Phe Asp Phe His Tyr Lys Lys Pro Leu Ser Leu Thr Phe |    |    |    |
| 50  | 55 | 60 |    |
| Val Leu Cys Arg Cys His Tyr Tyr Tyr Trp Glu Gln Cys Cys Val Ile |    |    |    |
| 65  | 70 | 75 | 80 |
| Asn Thr Gly Ala Leu Glu Thr Ala Thr Leu Asp Trp Ile Pro Thr Leu |    |    |    |
| 85  | 90 | 95 |    |
| Pro Leu Thr Cys Val Ala   |    |    |    |
| 100   |    |    |    |

&lt;210&gt; 2474

&lt;211&gt; 109

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2474

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Met Leu Cys Gly Glu Pro Ser Arg Gly Phe Ser Pro Ser His Leu His
  1             5             10             15
Gln His Ile Pro Asp Leu Ala Ser His Ser Cys Ala Leu Ser Ala Ser
          20             25             30
Phe Leu Phe Leu Val Pro Leu Pro Leu Glu Gln Val Asn Tyr Arg Asn
          35             40             45
Thr Arg Arg Asp Ser Arg Asn Pro Leu Ser Leu Arg Phe Tyr Leu Gln
          50             55             60
Met Ile Gly Ala Leu Phe Leu Gly Thr Ser Ser Ser Ser His Ser Gln
          65             70             75             80
Leu Val Thr Leu Glu Leu Pro Val Gly Arg Ala Gln Gly Cys Arg Ala
          85             90             95
Leu Gly Gly His Leu Pro His Ser Leu Pro Thr His Gln
          100             105

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&lt;210&gt; 2475

&lt;211&gt; 515

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2475

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Met Ser Ser Glu Met Glu Pro Leu Leu Leu Ala Trp Ser Tyr Phe Arg
  1             5             10             15
Arg Arg Lys Phe Gln Leu Cys Ala Asp Leu Cys Thr Gln Met Leu Glu

```

|   |     |     |
|---|-----|-----|
| 20  | 25  | 30  |
| Lys Ser Pro Tyr Asp Gln Glu Pro Asp Pro Glu Leu Pro Val His Gln |     |     |
| 35  | 40  | 45  |
| Ala Ala Trp Ile Leu Lys Ala Arg Ala Leu Thr Glu Met Val Tyr Ile |     |     |
| 50  | 55  | 60  |
| Asp Glu Ile Asp Val Asp Gln Glu Gly Ile Ala Glu Met Met Leu Asp |     |     |
| 65  | 70  | 75  |
| Glu Asn Ala Ile Ala Gln Val Pro Arg Pro Gly Thr Ser Leu Lys Leu |     |     |
| 85  | 90  | 95  |
| Pro Gly Thr Asn Gln Thr Gly Gly Pro Ser Gln Ala Val Arg Pro Ile |     |     |
| 100   | 105 | 110 |
| Thr Gln Ala Gly Arg Pro Ile Thr Gly Phe Leu Arg Pro Ser Thr Gln |     |     |
| 115   | 120 | 125 |
| Ser Gly Arg Pro Gly Thr Met Glu Gln Ala Ile Arg Thr Pro Arg Thr |     |     |
| 130   | 135 | 140 |
| Ala Tyr Thr Ala Arg Pro Ile Thr Ser Ser Ser Gly Arg Phe Val Arg |     |     |
| 145   | 150 | 155 |
| Leu Gly Thr Ala Ser Met Leu Thr Ser Pro Asp Gly Pro Phe Ile Asn |     |     |
| 165   | 170 | 175 |
| Ile Ser Arg Leu Asn Leu Thr Lys Tyr Ser Gln Lys Pro Lys Leu Ala |     |     |
| 180   | 185 | 190 |
| Lys Ala Leu Phe Glu Tyr Ile Phe His His Glu Asn Asp Val Lys Thr |     |     |
| 195   | 200 | 205 |
| Ala Leu Asp Leu Ala Ala Leu Ser Thr Glu His Ser Gln Tyr Lys Asp |     |     |
| 210   | 215 | 220 |
| Trp Trp Trp Lys Val Gln Ile Gly Lys Cys Tyr Tyr Arg Leu Gly Met |     |     |
| 225   | 230 | 235 |
| Tyr Arg Glu Ala Glu Lys Gln Phe Lys Ser Ala Leu Lys Gln Gln Glu |     |     |
| 245   | 250 | 255 |



Met Val Asp Thr Phe Leu Tyr Leu Ala Lys Val Tyr Val Ser Leu Asp  
260 265 270

Gln Pro Val Thr Ala Leu Asn Leu Phe Lys Gln Gly Leu Asp Lys Phe  
275 280 285

Pro Gly Glu Val Thr Leu Leu Cys Gly Ile Ala Arg Ile Tyr Glu Glu  
290 295 300

Met Asn Asn Met Ser Ser Ala Ala Glu Tyr Tyr Lys Glu Val Leu Lys  
305 310 315 320

Gln Asp Asn Thr His Val Glu Ala Ile Ala Cys Ile Gly Ser Asn His  
325 330 335

Phe Tyr Ser Asp Gln Pro Glu Ile Ala Leu Arg Phe Tyr Arg Arg Leu  
340 345 350

Leu Gln Met Gly Ile Tyr Asn Gly Gln Leu Phe Asn Asn Leu Gly Leu  
355 360 365

Cys Cys Phe Tyr Ala Gln Gln Tyr Asp Met Thr Leu Thr Ser Phe Glu  
370 375 380

Arg Ala Leu Ser Leu Ala Glu Asn Glu Glu Glu Ala Ala Asp Val Trp  
385 390 395 400

Tyr Asn Leu Gly His Val Ala Val Gly Ile Gly Asp Thr Asn Leu Ala  
405 410 415

His Gln Cys Phe Arg Leu Ala Leu Val Asn Asn Asn Asn His Ala Glu  
420 425 430

Ala Tyr Asn Asn Leu Ala Val Leu Glu Met Arg Lys Gly His Val Glu  
435 440 445

Gln Ala Arg Ala Leu Leu Gln Thr Ala Ser Ser Leu Ala Pro His Met  
450 455 460

Tyr Glu Pro His Phe Asn Phe Ala Thr Ile Ser Asp Lys Ile Gly Asp  
465 470 475 480

Leu Gln Arg Ser Tyr Val Ala Ala Gln Lys Ser Glu Ala Ala Phe Pro

|             |   |  |     |  |     |
|-------------|---|--|-----|--|-----|
|             | 485   |  | 490 |  | 495 |
| Asp His Val | Asp Thr Gln His Leu Ile Lys Gln Leu Arg Gln His Phe |  |     |  |     |
|             | 500   |  | 505 |  | 510 |
| Ala Met Leu |   |  |     |  |     |
|             | 515   |  |     |  |     |

&lt;210&gt; 2476

&lt;211&gt; 153

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2476

|   |     |     |     |
|---|-----|-----|-----|
| Met Asp Gln Asp Ser Val Ser Thr Lys Thr Cys Pro Glu Thr His Arg |     |     |     |
| 1   | 5   | 10  | 15  |
| Lys Ser Gly Pro Arg Arg Arg Glu Gln His Gly Ala Leu Gly Ala Ala |     |     |     |
|   | 20  | 25  | 30  |
| Asn Ala His Asp Thr Val Arg Asp Gly Glu Arg Tyr Asp Arg Arg Ser |     |     |     |
|   | 35  | 40  | 45  |
| Arg Pro Arg Arg Arg Glu Gln His Gly Ala Leu Gly Ala Ala Asn Ala |     |     |     |
|   | 50  | 55  | 60  |
| His Asp Thr Val Arg Asp Gly Glu Arg Tyr Asp Arg Arg Ser Arg Pro |     |     |     |
| 65  | 70  | 75  | 80  |
| Arg Arg Arg Glu Gln His Gly Ala Leu Gly Ala Ala Asn Ala His Asp |     |     |     |
|   | 85  | 90  | 95  |
| Thr Val Arg Asp Gly Glu Arg Tyr Asp Arg Arg Ser Arg Pro Arg Arg |     |     |     |
|   | 100 | 105 | 110 |
| Gln Glu Gln His Gly Ala Leu Gly Ala Ala Asn Ala His Asp Thr Val |     |     |     |
|   | 115 | 120 | 125 |

Arg Asp Gly Glu Arg Tyr Gly His Gly Gly His Lys Met Leu Leu Asn

130

135

140

Ile Tyr His Arg Pro Lys Trp Arg Thr

145

150

<210> 2477

<211> 160

<212> PRT

<213> Homo sapiens

<400> 2477

Met Ser Gln Thr Gly Pro Pro Met Ser Met Ala Ala Pro Ala Arg Asn

1

5

10

15

Ala Arg Val Ser Leu Pro Gly Leu Arg Val Asp Met Pro Ala Pro Cys

20

25

30

Gln Pro Pro Val Ala Trp Pro Gly Pro Pro Glu Pro Val Cys Pro Pro

35

40

45

Gln Gly Trp Arg Ser Leu Trp Ala Pro Gly Gly Phe Pro Pro Gly Asp

50

55

60

Ser His Gly Ala Pro Cys Ser Arg Val Val Thr Val Ser Pro Glu Met

65

70

75

80

Thr Glu Thr Arg His Ser Pro Gly Pro Gln Arg Gly Gly Ala Ser Arg

85

90

95

Gln Thr Leu Gly Met Glu Leu Trp Cys Gly Leu Ser Cys Met Val Ala

100

105

110

Ser Ala Phe Cys Gln His Phe Trp Met Asp Ile Gly Thr Ile Ile Ser

115

120

125

Ile Leu Ile His Gly Asp Phe Lys Thr Thr Ile Lys Leu Ile Gln Ser

|   |     |     |
|---|-----|-----|
| 130   | 135 | 140 |
| Pro Leu Thr Leu Thr Asp Val Gly Ile Pro Leu Leu Glu Arg Glu Leu |     |     |
| 145   | 150 | 155 |
|   |     | 160 |

&lt;210&gt; 2478

&lt;211&gt; 215

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2478

|   |     |     |
|---|-----|-----|
| Met Cys Trp Gly Lys His Trp Pro Arg Pro Glu Gly Arg Asn Leu Ala |     |     |
| 1   | 5   | 10  |
| Cys Ser Lys Gly Ser Pro Gly Trp Arg Thr Ala Gly Gln Gly Ser Gly |     |     |
| 20  | 25  | 30  |
| Ser Tyr Gly Ala Ala Thr Leu Gly Lys Gly Thr Glu Gln Arg Gly Val |     |     |
| 35  | 40  | 45  |
| Gly Ala Leu Arg Arg Gly Leu Leu Ser Phe Thr Cys Phe Cys Leu Ser |     |     |
| 50  | 55  | 60  |
| Asn Trp Thr Ser Gly Ala Gly Phe Ser Glu Met Gly Arg Ser Arg Phe |     |     |
| 65  | 70  | 75  |
| Glu Glu Gly Arg Leu Gly Tyr Ser Ser Asp Val Leu Ser Ala Arg Pro |     |     |
| 85  | 90  | 95  |
| Thr Met Ser Pro Thr Glu Met Leu Arg Ser Arg Ala Leu Asn Leu Gly |     |     |
| 100   | 105 | 110 |
| Ala Ala Thr Val Leu Arg Arg His Arg Ala Pro Gln Gly Thr Ser Ser |     |     |
| 115   | 120 | 125 |
| Tyr Gln Glu Gly Arg Arg Ala His Glu Ala Thr Ser Ala Glu Ser Asp |     |     |
| 130   | 135 | 140 |

Asp Asp Asn Gly Val Gln Val Leu Ala Ser Leu Ala Val Ser Cys Ala  
 145                      150                      155                      160  
 Gln His Ser Arg His Lys Asp Pro Val Gly Thr Gln Leu Gln Gln Ala  
                          165                      170                      175  
 Cys Ala Gln Val Pro Thr Ser Arg Ala Pro Leu Trp Pro Cys Pro Ser  
                          180                      185                      190  
 His Arg Leu Met His Ser Thr Asp Gly Pro Leu Asp Pro Glu Pro Leu  
                          195                      200                      205  
 Ser Thr Leu Leu Pro Ala Ala  
                          210                      215

<210> 2479

<211> 485

<212> PRT

<213> Homo sapiens

<400> 2479

Met Pro Trp Arg Thr Glu Ala Ala Arg Gln Met Trp Asp Thr Asn Glu  
 1                      5                      10                      15  
 Glu Glu Glu Glu Glu Glu Glu Glu Gly Leu Leu Lys Arg Lys Lys Arg  
                          20                      25                      30  
 Arg Arg Gln Lys Ser Arg Lys Tyr Gln Thr Gly Glu Tyr Leu Thr Glu  
                          35                      40                      45  
 Gln Glu Asp Glu Gln Arg Arg Lys Gly Arg Ala Asp Leu Lys Ala Arg  
                          50                      55                      60  
 Lys Gln Lys Thr Ser Ser Ser Gln Ser Leu Glu His Arg Leu Arg Asn  
                          65                      70                      75                      80  
 Arg Asn Leu Leu Leu Pro Asn Lys Val Gln Gly Ile Ser Asp Ser Pro

|   |     |  |     |  |     |
|---|-----|--|-----|--|-----|
|   | 85  |  | 90  |  | 95  |
| Asn Gly Phe Leu Pro Asn Asn Leu Glu Glu Pro Ala Cys Leu Glu Asn |     |  |     |  |     |
|   | 100 |  | 105 |  | 110 |
| Ser Glu Lys Pro Ser Gly Lys Arg Lys Cys Lys Thr Lys His Met Ala |     |  |     |  |     |
|   | 115 |  | 120 |  | 125 |
| Thr Val Ser Glu Glu Ala Lys Gly Lys Gly Arg Trp Ser Gln Gln Lys |     |  |     |  |     |
|   | 130 |  | 135 |  | 140 |
| Thr Arg Ser Pro Lys Ser Pro Thr Pro Val Lys Pro Thr Glu Pro Cys |     |  |     |  |     |
|   | 145 |  | 150 |  | 155 |
| Thr Pro Ser Lys Ser Arg Ser Ala Ser Ser Glu Glu Ala Ser Glu Ser |     |  |     |  |     |
|   | 165 |  | 170 |  | 175 |
| Pro Thr Ala Arg Gln Ile Pro Pro Glu Ala Arg Arg Leu Ile Val Asn |     |  |     |  |     |
|   | 180 |  | 185 |  | 190 |
| Lys Asn Ala Gly Glu Thr Leu Leu Gln Arg Ala Ala Arg Leu Gly Tyr |     |  |     |  |     |
|   | 195 |  | 200 |  | 205 |
| Lys Asp Val Val Leu Tyr Cys Leu Gln Lys Asp Ser Glu Asp Val Asn |     |  |     |  |     |
|   | 210 |  | 215 |  | 220 |
| His Arg Asp Asn Ala Gly Tyr Thr Ala Leu His Glu Ala Cys Ser Arg |     |  |     |  |     |
|   | 225 |  | 230 |  | 235 |
| Gly Trp Thr Asp Ile Leu Asn Ile Leu Leu Glu His Gly Ala Asn Val |     |  |     |  |     |
|   | 245 |  | 250 |  | 255 |
| Asn Cys Ser Ala Gln Asp Gly Thr Arg Pro Val His Asp Ala Val Val |     |  |     |  |     |
|   | 260 |  | 265 |  | 270 |
| Asn Asp Asn Leu Glu Thr Ile Trp Leu Leu Leu Ser Tyr Gly Ala Asp |     |  |     |  |     |
|   | 275 |  | 280 |  | 285 |
| Pro Thr Leu Ala Thr Tyr Ser Gly Gln Thr Ala Met Lys Leu Ala Ser |     |  |     |  |     |
|   | 290 |  | 295 |  | 300 |
| Ser Asp Thr Met Lys Arg Phe Leu Ser Asp His Leu Ser Asp Leu Gln |     |  |     |  |     |
|   | 305 |  | 310 |  | 315 |
|   |     |  |     |  | 320 |

Gly Arg Ala Glu Gly Asp Pro Gly Val Ser Trp Asp Phe Tyr Ser Ser  
325 330 335  
Ser Ala Leu Glu Glu Lys Asp Gly Phe Ala Cys Asp Leu Leu His Asn  
340 345 350  
Pro Pro Gly Ser Ser Asp Gln Glu Gly Asp Asp Pro Met Glu Glu Asp  
355 360 365  
Asp Phe Met Phe Glu Leu Ser Asp Lys Pro Leu Leu Pro Cys Tyr Asn  
370 375 380  
Leu Gln Val Ser Val Ser Arg Gly Pro Cys Asn Trp Phe Leu Phe Ser  
385 390 395 400  
Asp Val Leu Lys Arg Leu Lys Leu Ser Ser Arg Ile Phe Gln Ala Arg  
405 410 415  
Phe Pro His Phe Glu Ile Thr Thr Met Pro Lys Ala Glu Phe Tyr Arg  
420 425 430  
Gln Val Ala Ser Ser Gln Leu Leu Thr Pro Ala Glu Arg Pro Gly Gly  
435 440 445  
Leu Asp Asp Arg Ser Pro Pro Gly Ser Ser Glu Thr Val Glu Leu Val  
450 455 460  
Arg Tyr Glu Pro Asp Leu Leu Arg Leu Leu Gly Ser Glu Val Glu Phe  
465 470 475 480  
Gln Ser Cys Asn Ser  
485

&lt;210&gt; 2480

&lt;211&gt; 393

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2480

|     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| Met | Phe | Lys | Glu | Gln | Gln | Leu | Gln | Ile | Phe | Asn | Leu | Met | Lys | Phe | Asp |
| 1   |     |     |     | 5   |     |     |     | 10  |     |     |     |     |     | 15  |     |
| Ser | Tyr | Thr | Arg | Phe | Leu | Lys | Ser | Pro | Leu | Tyr | Gln | Glu | Cys | Ile | Leu |
|     |     |     | 20  |     |     |     |     | 25  |     |     |     |     | 30  |     |     |
| Ala | Glu | Val | Glu | Gly | Arg | Ala | Leu | Pro | Asp | Ser | Gln | Gln | Val | Pro | Ser |
|     |     | 35  |     |     |     |     | 40  |     |     |     |     |     | 45  |     |     |
| Ser | Pro | Ala | Ser | Lys | His | Ser | Leu | Gly | Ser | Asp | His | Ser | Ser | Val | Ser |
|     | 50  |     |     |     |     |     | 55  |     |     |     | 60  |     |     |     |     |
| Thr | Pro | Lys | Lys | Leu | Ser | Gly | Lys | Ser | Lys | Ser | Gly | Arg | Ser | Leu | Asn |
|     | 65  |     |     |     |     | 70  |     |     |     |     | 75  |     |     | 80  |     |
| Glu | Glu | Leu | Gly | Asp | Glu | Asp | Ser | Glu | Lys | Lys | Arg | Lys | Gly | Ala | Phe |
|     |     |     |     | 85  |     |     |     |     |     | 90  |     |     |     | 95  |     |
| Phe | Ser | Trp | Ser | Arg | Thr | Arg | Ser | Thr | Gly | Arg | Ser | Gln | Lys | Lys | Arg |
|     |     |     |     | 100 |     |     |     |     | 105 |     |     |     |     | 110 |     |
| Glu | His | Gly | Asp | His | Ala | Asp | Asp | Ala | Leu | His | Ala | Asn | Gly | Gly | Leu |
|     |     | 115 |     |     |     |     |     | 120 |     |     |     |     | 125 |     |     |
| Cys | Arg | Arg | Glu | Ser | Gln | Gly | Ser | Val | Ser | Ser | Ala | Gly | Ser | Leu | Asp |
|     | 130 |     |     |     |     |     | 135 |     |     |     |     |     | 140 |     |     |
| Leu | Ser | Glu | Ala | Cys | Arg | Thr | Leu | Ala | Pro | Glu | Lys | Asp | Lys | Ala | Thr |
|     | 145 |     |     |     |     |     | 150 |     |     |     |     | 155 |     | 160 |     |
| Lys | His | Cys | Cys | Ile | His | Leu | Pro | Asp | Gly | Thr | Ser | Cys | Val | Val | Ala |
|     |     |     |     | 165 |     |     |     |     |     | 170 |     |     |     | 175 |     |
| Val | Lys | Ala | Gly | Phe | Ser | Ile | Lys | Asp | Ile | Leu | Ser | Gly | Leu | Cys | Glu |
|     |     |     | 180 |     |     |     |     |     | 185 |     |     |     |     | 190 |     |
| Arg | His | Gly | Ile | Asn | Gly | Ala | Ala | Ala | Asp | Leu | Phe | Leu | Val | Gly | Gly |
|     |     | 195 |     |     |     |     |     | 200 |     |     |     |     |     | 205 |     |
| Asp | Lys | Pro | Leu | Val | Leu | His | Gln | Asp | Ser | Ser | Ile | Leu | Glu | Ser | Arg |
|     | 210 |     |     |     |     |     | 215 |     |     |     |     |     |     | 220 |     |



Asp Leu Arg Leu Glu Lys Arg Thr Leu Phe Arg Leu Asp Leu Val Pro  
225 230 235 240  
Ile Asn Arg Ser Val Gly Leu Lys Ala Lys Pro Thr Lys Pro Val Thr  
245 250 255  
Glu Val Leu Arg Pro Val Val Ala Arg Tyr Gly Leu Asp Leu Ser Gly  
260 265 270  
Leu Leu Val Arg Leu Ser Gly Glu Lys Glu Pro Leu Asp Leu Gly Ala  
275 280 285  
Pro Ile Ser Ser Leu Asp Gly Gln Arg Val Val Leu Glu Glu Lys Asp  
290 295 300  
Pro Ser Arg Gly Lys Ala Ser Ala Asp Lys Gln Lys Gly Val Pro Val  
305 310 315 320  
Lys Gln Asn Thr Ala Val Asn Ser Ser Ser Arg Asn His Ser Ala Thr  
325 330 335  
Val Ile Pro His Pro Gly Pro Pro Cys Ala Leu Leu Leu Pro Leu Trp  
340 345 350  
Pro Pro Pro Ala Leu Arg Ser Ala Leu Val Leu Pro Tyr Arg Leu Leu  
355 360 365  
Ile Thr Val Cys Leu Pro His Ala Pro Trp Arg Gly Leu Ser Arg Pro  
370 375 380  
Cys Arg Cys Pro Ala Pro Ser Tyr Leu  
385 390

&lt;210&gt; 2481

&lt;211&gt; 100

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2481

Met Ser Tyr Leu Gly Ser Leu Phe Val Phe Glu Cys Leu Val Phe Ile  
 1 5 10 15  
 Glu Pro Tyr Ser Leu Arg Arg Trp Asn Ile Trp Lys Asn Phe Lys Thr  
 20 25 30  
 Ile Lys Ile Leu Lys Gln Ser Trp Gln Thr Lys Thr Ser Thr Ser Val  
 35 40 45  
 His Asp Cys Ile Ile Thr Ile Ile Val Pro Leu His Ile Met Phe Phe  
 50 55 60  
 Phe Leu Arg Gln Lys Arg Cys Leu Lys Thr Lys Asn Cys Ala Glu Lys  
 65 70 75 80  
 Val Cys Pro Thr Tyr Leu Trp Tyr Met Ile Gly Tyr Ile Lys Gly Arg  
 85 90 95  
 Tyr Trp Leu Asn  
 100

&lt;210&gt; 2482

&lt;211&gt; 108

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2482

Met Ile Leu Ser Leu Phe Tyr Val Leu Leu Cys His Leu Asp Ile Leu  
 1 5 10 15  
 Phe Gly Asp Thr Ser Ser Lys Ile Phe Cys Ser Phe Trp Ala Val Val  
 20 25 30  
 Thr Leu Val Leu Ser Phe Asp Ser Pro Phe Tyr Ile Leu Asp Thr Ser  
 35 40 45

Phe Ile Arg Tyr Pro Phe Cys Lys Ala Cys Asn Leu Ser Phe Tyr Phe  
 50 55 60  
 Phe Asn Ser Ile Phe Gln Lys Gln Lys Phe Ser Met Leu Met Lys Leu  
 65 70 75 80  
 Ser Leu Ser Ser Phe Ser Phe Met Tyr Cys Val Phe Gly Ile Val Ser  
 85 90 95  
 Lys Thr Ser Leu Pro Glu Met Arg Ser Cys Met Val  
 100 105

<210> 2483

<211> 205

<212> PRT

<213> Homo sapiens

<400> 2483

Met Met Ser Ser Ser Thr Ala His Trp His Gln Trp Ser Val Ile Val  
 1 5 10 15  
 Ser Asn Arg Gly Ala Trp Gln Gly Lys Ala Phe Leu Pro Pro Ser Met  
 20 25 30  
 Pro Val Ser Glu Gly Leu Asn Ile Gln Asp Ser Ser Pro Gly Trp Gly  
 35 40 45  
 Pro Glu Pro Trp Tyr Trp Thr Leu Thr Arg Thr Pro Met Cys Gln Ser  
 50 55 60  
 Thr Ser His His Ala His Thr Gln Gly Leu Gly Leu Ser Lys Cys Pro  
 65 70 75 80  
 Ala Ala Pro Glu Val Ser Ser Pro Asp Leu Gly Ser Gly Ser Ala Ala  
 85 90 95  
 Asp Lys Ser Pro Ala Ser Arg Pro Ala Trp Thr Lys Pro Glu Leu Phe

100 105 110  
Arg Ser Leu Lys Arg Leu Leu His Ser Pro Thr Pro Arg Thr Asp Gln  
115 120 125  
Arg Gly Arg Gly Cys Arg Trp Arg Glu Arg Arg Val Glu Ser Gly Ala  
130 135 140  
Arg Gly Trp Lys Arg Leu Cys Arg Leu Cys Cys Pro Cys Arg Trp Ser  
145 150 155 160  
Trp Phe Thr Leu Ser Pro Ala Phe Pro Pro Pro Glu Thr Ala His His  
165 170 175  
Cys Gln Ile Glu Ser Lys Asn Pro Thr Pro Asn Lys Asp Glu Ala Thr  
180 185 190  
Leu Ala Phe Thr Pro Arg Phe Phe Arg Phe Leu Gly Leu  
195 200 205

&lt;210&gt; 2484

&lt;211&gt; 259

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2484

Met Lys Asp Leu Gly Asn Pro Val Leu Asp Glu Glu Gly Val Ala Gln  
1 5 10 15  
Arg Glu Glu Ser Ala Gln Gly Thr Pro Ile Leu Gly Asp Gly Ala Thr  
20 25 30  
Gly Ala Ser Pro Arg Leu Lys Gly Glu Arg Gly Ser Arg Pro Ala Cys  
35 40 45  
Arg Ser Gly Arg Arg Ile Gly Leu Pro Ser Gly Trp Gly Gly Ser Lys  
50 55 60

Pro Thr Ile Ala Ala Leu Gly Gly Gly Gly Ala Leu Gln Gly Pro Ala  
 65 70 75 80  
 Ala Pro Ser Gly Pro Leu Pro Pro His Arg Arg Phe Tyr Asp Ser Gly  
 85 90 95  
 Ala Ile Met Leu Arg Asp Glu Ala Thr Ile Leu Thr Gly Met Leu Ile  
 100 105 110  
 Gly Leu Ser Ala Ile Asp Phe Ser Phe Cys Leu Lys Gly Glu Val Leu  
 115 120 125  
 Asp Gly Lys Thr Pro Val Val Ile Asp Tyr Thr Pro Tyr Leu Lys Phe  
 130 135 140  
 Thr Gln Ser Tyr Asp Tyr Leu Thr Asp Glu Glu Glu Arg His Ser Ala  
 145 150 155 160  
 Glu Ser Ser Thr Ser Glu Asp Asn Ser Pro Glu His Pro Tyr Leu Pro  
 165 170 175  
 Leu Val Thr Asp Glu Asp Ser Trp Tyr Ser Lys Trp His Lys Met Glu  
 180 185 190  
 Gln Lys Phe Arg Ile Val Tyr Ala Gln Lys Gly Tyr Leu Glu Glu Leu  
 195 200 205  
 Val Arg Leu Arg Glu Ser Gln Leu Lys Asp Leu Glu Ala Glu Asn Arg  
 210 215 220  
 Arg Leu Gln Leu Gln Leu Glu Glu Ala Ala Ala Gln Asn Gln Arg Glu  
 225 230 235 240  
 Lys Arg Glu Leu Glu Gly Val Ile Leu Glu Leu Gln Glu Gln Leu Ser  
 245 250 255  
 Asp Pro Gln

&lt;210&gt; 2485

&lt;211&gt; 161

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2485

Met His Gly Ser Lys Trp Leu Asp Ser Trp Val Gly Trp Gly Ser Gln

1 5 10 15

Ser Arg Leu Pro Glu Gly Leu Glu Val Thr Pro Pro Gly Gly Asp Gly

20 25 30

Ser Ser Gln Val Gly Cys His Gln Ser Arg Gln His Cys Leu Leu Gly

35 40 45

Thr Pro Gly Glu Ala Asp Arg Val Ser Gly Phe Gln Leu Gly Gly Ser

50 55 60

Pro Ala Glu Asn Pro Val Lys Pro Ala Phe His Ser Ser Pro Val Cys

65 70 75 80

Pro Glu Pro Gly Leu Arg Ala Ala Leu Cys Met Pro Ala Leu Pro Thr

85 90 95

Trp Gln Ser Ser Gly Gly Arg Thr Pro Arg Leu Ser Gly Asp Ser Gln

100 105 110

Ala Asn Val Ser Ile Pro Gly Ser Ala Leu Ser Cys His Glu Phe Arg

115 120 125

Lys Ala Glu Ala Ala Gln Gln Met Gly Thr Arg Gly Arg Thr Ala Ile

130 135 140

His Ser Leu Ser Ser His Pro Gln Ala Cys Arg Ala Pro Gly Leu Trp

145 150 155 160

Cys

&lt;210&gt; 2486

&lt;211&gt; 423

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2486

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Met Lys Arg Asn Gly Ser Arg Asn Cys Leu Asn Arg Arg Ser Arg Phe
  1             5             10             15
Gly Ser Arg Glu Arg Asp Trp Leu Arg Glu Asp Val Lys Arg Gly Cys
             20             25             30
Val Tyr Leu Tyr Gly Ala Asp Thr Thr Thr Ala Thr Thr Thr Thr Thr
             35             40             45
Thr Ser Ser Ser Ser Ser Ser Ser Ser Ser Ser Ser Ser Asp Leu His Leu
             50             55             60
Val Leu Cys Thr Val Glu Thr Pro Ala Ser Glu Ile Cys Ala Gly Glu
             65             70             75             80
Gly Arg Glu Ser Leu Tyr Leu Gln Leu His Gly Asp Leu Val Arg Arg
             85             90             95
Leu Glu Pro Thr Glu Arg Pro Leu Gln Ile Val Tyr Asp Tyr Leu Ser
             100            105            110
Arg Leu Gly Phe Asp Asp Pro Val Arg Ile Gln Glu Glu Ala Thr Asn
             115            120            125
Pro Asp Leu Gly Cys Met Ile Arg Phe Tyr Gly Glu Lys Pro Cys His
             130            135            140
Met Asp Arg Leu Asp Arg Ile Leu Leu Ser Gly Ile Tyr Asn Val Arg
             145            150            155            160
Lys Gly Lys Thr Gln Leu His Lys Trp Ala Glu Arg Leu Val Val Leu
             165            170            175
Cys Gly Thr Cys Leu Ile Val Ser Ser Val Lys Asp Cys Gln Thr Gly

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180 185 190  
Lys Met His Ile Leu Pro Leu Val Gly Gly Lys Ile Glu Glu Val Lys  
195 200 205  
Arg Arg Gln Tyr Ser Leu Ala Phe Ser Ser Ala Gly Ala Gln Ala Gln  
210 215 220  
Thr Tyr His Val Ser Phe Glu Thr Leu Ala Glu Tyr Gln Arg Trp Gln  
225 230 235 240  
Arg Gln Ala Ser Lys Val Val Ser Gln Arg Ile Ser Thr Val Asp Leu  
245 250 255  
Ser Cys Tyr Ser Leu Glu Glu Val Pro Glu His Leu Phe Tyr Ser Gln  
260 265 270  
Asp Ile Thr Tyr Leu Asn Leu Arg His Asn Phe Met Gln Leu Glu Arg  
275 280 285  
Pro Gly Gly Leu Asp Thr Leu Tyr Lys Phe Ser Gln Leu Lys Gly Leu  
290 295 300  
Asn Leu Ser His Asn Lys Leu Gly Leu Phe Pro Ile Leu Leu Cys Glu  
305 310 315 320  
Ile Ser Thr Leu Thr Glu Leu Asn Leu Ser Cys Asn Gly Phe His Asp  
325 330 335  
Leu Pro Ser Gln Ile Gly Asn Leu Leu Asn Leu Gln Thr Leu Cys Leu  
340 345 350  
Asp Gly Asn Phe Leu Thr Thr Leu Pro Glu Glu Leu Gly Asn Leu Gln  
355 360 365  
Gln Leu Ser Ser Leu Gly Ile Ser Phe Asn Asn Phe Ser Gln Ile Pro  
370 375 380  
Glu Val Tyr Glu Lys Leu Thr Met Leu Asp Arg Val Val Met Ala Gly  
385 390 395 400  
Asn Cys Leu Glu Val Leu Asn Leu Gly Val Leu Asn Arg Met Asn His  
405 410 415



Ile Lys His Val Asp Leu Arg

420

<210> 2487

<211> 104

<212> PRT

<213> Homo sapiens

<400> 2487

Met Lys Ser Tyr Pro Ser Cys His Trp Trp Ile Met Phe Leu Val Ser

1 5 10 15

Cys Leu Gly Thr Leu Thr Pro Gly His Glu Glu Phe Phe Phe Phe Leu

20 25 30

Phe Leu Thr His Ile Leu Thr Leu Ser Pro Arg Leu Gly Cys Ser Gly

35 40 45

Thr Ile Ser Thr His Cys Asn Leu Cys Leu Leu Gly Ser Ser Asp Ser

50 55 60

Cys Ala Ser Val Ser Gln Val Ala Gly Thr Thr Gly Val His His His

65 70 75 80

Ser Gln Pro Ile Phe Phe Leu Phe Phe Ile Phe Ser Arg Val Gly Ile

85 90 95

Ser Pro Tyr Arg Leu Gly Trp Ser

100

<210> 2488

<211> 879

<212> PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2488

Met Asn Pro Ile Thr Gln Ser Gln Phe Val Pro Leu Gly Glu Val Leu  
1 5 10 15  
Cys Cys Ala Ile Ser Asp Met Asn Thr Ala Gln Ile Val Val Thr Gln  
20 25 30  
Glu Ser Leu Leu Glu Arg Leu Met Lys His Tyr Pro Gly Ile Ala Ile  
35 40 45  
Pro Ser Glu Asp Ile Leu Tyr Thr Thr Leu Gly Thr Leu Ile Lys Glu  
50 55 60  
Arg Lys Ile Tyr His Thr Gly Glu Gly Tyr Phe Ile Val Thr Pro Gln  
65 70 75 80  
Thr Tyr Phe Ile Thr Asn Thr Thr Thr Gln Glu Asn Lys Arg Met Leu  
85 90 95  
Pro Ser Asp Glu Ser Arg Leu Met Pro Ala Ser Met Thr Tyr Leu Val  
100 105 110  
Ser Met Glu Ser Cys Ala Glu Ser Ala Gln Glu Asn Ala Ala Pro Ile  
115 120 125  
Ser His Cys Gln Ser Cys Gln Cys Phe Arg Asp Met His Thr Gln Asp  
130 135 140  
Val Gln Glu Ala Pro Val Ala Ala Glu Val Thr Arg Lys Ser His Arg  
145 150 155 160  
Gly Leu Gly Glu Ser Val Ser Trp Val Gln Asn Gly Ala Val Ser Val  
165 170 175  
Ser Ala Glu His His Ile Cys Glu Ser Thr Lys Pro Leu Pro Tyr Thr  
180 185 190  
Arg Asp Lys Glu Lys Gly Lys Lys Phe Gly Phe Ser Leu Leu Trp Arg  
195 200 205

Ser Leu Ser Arg Lys Glu Lys Pro Lys Thr Glu His Ser Ser Phe Ser  
210 215 220  
Ala Gln Phe Pro Pro Glu Glu Trp Pro Val Arg Asp Glu Asp Asp Leu  
225 230 235 240  
Asp Asn Ile Pro Arg Asp Val Glu His Glu Ile Ile Lys Arg Ile Asn  
245 250 255  
Pro Ile Leu Thr Val Asp Asn Leu Ile Lys His Thr Val Leu Met Gln  
260 265 270  
Lys Tyr Glu Glu Gln Lys Lys Tyr Asn Ser Gln Gly Thr Ser Thr Asp  
275 280 285  
Met Leu Thr Ile Gly His Lys Tyr Pro Ser Lys Glu Gly Val Lys Lys  
290 295 300  
Arg Gln Gly Leu Ser Ala Lys Pro Gln Gly Gln Gly His Ser Arg Arg  
305 310 315 320  
Asp Arg His Lys Ala Arg Asn Gln Gly Ser Glu Phe Gln Pro Gly Ser  
325 330 335  
Ile Arg Leu Glu Lys His Pro Lys Leu Pro Ala Thr Gln Pro Ile Pro  
340 345 350  
Arg Ile Lys Ser Pro Asn Glu Met Val Gly Gln Lys Pro Leu Gly Glu  
355 360 365  
Ile Thr Thr Val Leu Gly Ser His Leu Ile Tyr Lys Lys Arg Ile Ser  
370 375 380  
Asn Pro Phe Gln Gly Leu Ser His Arg Gly Ser Thr Ile Ser Lys Gly  
385 390 395 400  
His Lys Ile Gln Lys Thr Ser Asp Leu Lys Pro Ser Gln Thr Gly Pro  
405 410 415  
Lys Glu Lys Pro Phe Gln Lys Pro Arg Ser Leu Asp Ser Ser Arg Ile  
420 425 430  
Phe Asp Gly Lys Ala Lys Glu Pro Tyr Ala Glu Gln Pro Asn Asp Lys

435 440 445  
Met Glu Ala Glu Ser Ile Tyr Ile Asn Asp Pro Thr Val Lys Pro Ile  
450 455 460  
Asn Asp Asp Phe Arg Gly His Leu Phe Ser His Pro Gln Gln Ser Met  
465 470 475 480  
Leu Gln Asn Asp Gly Lys Cys Cys Pro Phe Met Glu Ser Met Leu Arg  
485 490 495  
Tyr Asp Val Tyr Gly Gly Glu Asn Glu Val Ile Pro Glu Val Leu Arg  
500 505 510  
Lys Ser His Ser His Phe Asp Lys Leu Gly Glu Thr Lys Gln Thr Pro  
515 520 525  
His Ser Leu Pro Ser Arg Gly Ala Ser Phe Ser Asp Arg Thr Pro Ser  
530 535 540  
Ala Cys Arg Leu Val Asp Asn Thr Ile His Gln Phe Gln Asn Leu Gly  
545 550 555 560  
Leu Leu Asp Tyr Pro Val Gly Val Asn Pro Leu Arg Gln Ala Ala Arg  
565 570 575  
Gln Asp Lys Asp Ser Glu Glu Leu Leu Arg Lys Gly Phe Val Gln Asp  
580 585 590  
Ala Glu Thr Thr Ser Leu Glu Asn Glu Gln Leu Ser Asn Asp Asp Gln  
595 600 605  
Ala Leu Tyr Gln Asn Glu Val Glu Asp Asp Asp Gly Ala Cys Ser Ser  
610 615 620  
Leu Tyr Leu Glu Glu Asp Asp Ile Ser Glu Asn Asp Asp Leu Arg Gln  
625 630 635 640  
Met Leu Pro Gly His Ser Gln Tyr Ser Phe Thr Gly Gly Ser Gln Gly  
645 650 655  
Asn His Leu Gly Lys Gln Lys Val Ile Glu Arg Ser Leu Thr Glu Tyr  
660 665 670

Asn Ser Thr Met Glu Arg Val Glu Ser Gln Val Leu Lys Arg Asn Glu  
675 680 685

Cys Tyr Lys Pro Thr Gly Leu His Ala Thr Pro Gly Glu Ser Gln Glu  
690 695 700

Pro Asn Leu Ser Ala Glu Ser Cys Gly Leu Asn Ser Gly Ala Gln Phe  
705 710 715 720

Gly Phe Asn Tyr Glu Glu Glu Pro Ser Val Ala Lys Cys Val Gln Ala  
725 730 735

Ser Ala Pro Ala Asp Glu Arg Ile Phe Asp Tyr Tyr Ser Ala Arg Lys  
740 745 750

Ala Ser Phe Glu Ala Glu Val Ile Gln Asp Thr Ile Gly Asp Thr Gly  
755 760 765

Lys Lys Pro Ala Ser Trp Ser Gln Ser Pro Gln Asn Gln Glu Met Arg  
770 775 780

Lys His Phe Pro Gln Lys Phe Gln Leu Phe Asn Thr Ser His Met Pro  
785 790 795 800

Val Leu Ala Gln Asp Val Gln Tyr Glu His Ser His Leu Glu Gly Thr  
805 810 815

Glu Asn His Ser Met Ala Gly Asp Ser Gly Ile Asp Ser Pro Arg Thr  
820 825 830

Gln Ser Leu Gly Ser Asn Asn Ser Val Ile Leu Asp Gly Leu Lys Arg  
835 840 845

Arg Gln Asn Phe Leu Gln Asn Val Glu Gly Thr Lys Ser Ser Gln Pro  
850 855 860

Leu Thr Ser Asn Ser Leu Leu Pro Leu Thr Pro Val Ile Asn Val  
865 870 875

&lt;210&gt; 2489

&lt;211&gt; 636

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2489

Met Phe Arg Lys Lys Lys Lys Lys Arg Pro Glu Ile Ser Ala Pro Gln

1 5 10 15

Asn Phe Gln His Arg Val His Thr Ser Phe Asp Pro Lys Glu Gly Lys

20 25 30

Phe Val Gly Leu Pro Pro Gln Trp Gln Asn Ile Leu Asp Thr Leu Arg

35 40 45

Arg Pro Lys Pro Val Val Asp Pro Ser Arg Ile Ala Arg Val Gln Leu

50 55 60

Gln Pro Met Lys Thr Val Val Arg Gly Ser Ala Met Pro Val Asp Gly

65 70 75 80

Tyr Ile Ser Gly Leu Leu Asn Asp Ile Gln Lys Leu Ser Val Ile Ser

85 90 95

Ser Asn Thr Leu Arg Gly Arg Ser Pro Thr Ser Arg Arg Arg Ala Gln

100 105 110

Ser Leu Gly Leu Leu Gly Asp Glu His Trp Ala Thr Asp Pro Asp Met

115 120 125

Tyr Leu Gln Ser Pro Gln Ser Glu Arg Thr Asp Pro His Gly Leu Tyr

130 135 140

Leu Ser Cys Asn Gly Gly Thr Pro Ala Gly His Lys Gln Met Pro Trp

145 150 155 160

Pro Glu Pro Gln Ser Pro Arg Val Leu Pro Asn Gly Leu Ala Ala Lys

165 170 175

Ala Gln Ser Leu Gly Pro Ala Glu Phe Gln Gly Ala Ser Gln Arg Cys

180 185 190

Leu Gln Leu Gly Ala Cys Leu Gln Ser Ser Pro Pro Gly Ala Ser Pro  
195 200 205

Pro Thr Gly Thr Asn Arg His Gly Met Lys Ala Ala Lys His Gly Ser  
210 215 220

Glu Glu Ala Arg Pro Gln Ser Cys Leu Val Gly Ser Ala Thr Gly Arg  
225 230 235 240

Pro Gly Gly Glu Gly Ser Pro Ser Pro Lys Thr Arg Glu Ser Ser Leu  
245 250 255

Lys Arg Arg Leu Phe Arg Ser Met Phe Leu Ser Thr Ala Ala Thr Ala  
260 265 270

Pro Pro Ser Ser Ser Lys Pro Gly Pro Pro Pro Gln Ser Lys Pro Asn  
275 280 285

Ser Ser Phe Arg Pro Pro Gln Lys Asp Asn Pro Pro Ser Leu Val Ala  
290 295 300

Lys Ala Gln Ser Leu Pro Ser Asp Gln Pro Val Gly Thr Phe Ser Pro  
305 310 315 320

Leu Thr Thr Ser Asp Thr Ser Ser Pro Gln Lys Ser Leu Arg Thr Ala  
325 330 335

Pro Ala Thr Gly Gln Leu Pro Gly Arg Ser Ser Pro Ala Gly Ser Pro  
340 345 350

Arg Thr Trp His Ala Gln Ile Ser Thr Ser Asn Leu Tyr Leu Pro Gln  
355 360 365

Asp Pro Thr Val Ala Lys Gly Ala Leu Ala Gly Glu Gly Thr Gly Val  
370 375 380

Val Thr His Glu Gln Phe Lys Ala Ala Leu Arg Met Val Val Asp Gln  
385 390 395 400

Gly Asp Pro Arg Leu Leu Leu Asp Ser Tyr Val Lys Ile Gly Glu Gly  
405 410 415

Ser Thr Gly Ile Val Cys Leu Ala Arg Glu Lys His Ser Gly Arg Gln

420 425 430  
Val Ala Val Lys Met Met Asp Leu Arg Lys Gln Gln Arg Arg Glu Leu  
435 440 445  
Leu Phe Asn Glu Val Val Ile Met Arg Asp Tyr Gln His Phe Asn Val  
450 455 460  
Val Glu Met Tyr Lys Ser Tyr Leu Val Gly Glu Glu Leu Trp Val Leu  
465 470 475 480  
Met Glu Phe Leu Gln Gly Gly Ala Leu Thr Asp Ile Val Ser Gln Val  
485 490 495  
Arg Leu Asn Glu Glu Gln Ile Ala Thr Val Cys Glu Ala Val Leu Gln  
500 505 510  
Ala Leu Ala Tyr Leu His Ala Gln Gly Val Ile His Arg Asp Ile Lys  
515 520 525  
Ser Asp Ser Ile Leu Leu Thr Leu Asp Gly Arg Val Lys Leu Ser Asp  
530 535 540  
Phe Gly Phe Cys Ala Gln Ile Ser Lys Asp Val Pro Lys Arg Lys Ser  
545 550 555 560  
Leu Val Gly Thr Pro Tyr Trp Met Ala Pro Glu Val Ile Ser Arg Ser  
565 570 575  
Leu Tyr Ala Thr Glu Val Ser Pro Val Leu Arg Asp Phe Leu Glu Arg  
580 585 590  
Met Leu Val Arg Asp Pro Gln Glu Arg Ala Thr Ala Gln Glu Leu Leu  
595 600 605  
Asp His Pro Phe Leu Leu Gln Thr Gly Leu Pro Glu Cys Leu Val Pro  
610 615 620  
Leu Ile Gln Leu Tyr Arg Lys Gln Thr Ser Thr Cys  
625 630 635



&lt;210&gt; 2490

&lt;211&gt; 111

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2490

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Met His Ala Asp Glu Tyr Ala Ser Trp Val Phe Thr Arg Ser Ser Trp
  1             5             10             15
Glu Ala Ser Ser Val Ser Gln Ala His Arg Leu Cys Ala Arg Glu Gly
             20             25             30
Glu His Leu Ser Leu Gly Thr Ala Phe Val Pro Ala Tyr Arg Pro Pro
             35             40             45
Gln Glu Pro Ala Ser Trp Leu Pro Ser His Arg Pro Pro Ala Gly Leu
             50             55             60
Thr Tyr Ala Ser Phe Cys Arg Arg Gln Ala His Phe Ser Pro Val Thr
             65             70             75             80
Asn Met Glu Leu Arg Val Lys Glu Gly Ser Cys Thr His Leu Leu Ile
             85             90             95
His Leu Phe Thr His Leu Leu Thr His Gln Ser Phe Leu Gln Gln
             100            105            110

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&lt;210&gt; 2491

&lt;211&gt; 370

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2491

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Met Leu Ala Pro Gly Ser Ser Pro Gly Gln Arg Gly Arg Leu Ala Leu

```

|   |     |     |     |
|---|-----|-----|-----|
| 1   | 5   | 10  | 15  |
| Gln Trp Arg Gln Val Ser Trp Ile Thr Cys Trp Ile Ala Leu Tyr Ala |     |     |     |
| 20  | 25  | 30  |     |
| Val Glu Ala Leu Pro Thr Cys Pro Phe Ser Cys Lys Cys Asp Ser Arg |     |     |     |
| 35  | 40  | 45  |     |
| Ser Leu Glu Val Asp Cys Ser Gly Leu Gly Leu Thr Thr Val Pro Pro |     |     |     |
| 50  | 55  | 60  |     |
| Asp Val Pro Ala Ala Thr Arg Thr Leu Leu Leu Leu Asn Asn Lys Leu |     |     |     |
| 65  | 70  | 75  | 80  |
| Ser Ala Leu Pro Ser Trp Ala Phe Ala Asn Leu Ser Ser Leu Gln Arg |     |     |     |
| 85  | 90  | 95  |     |
| Leu Asp Leu Ser Asn Asn Phe Leu Asp Arg Leu Pro Arg Ser Ile Phe |     |     |     |
| 100   | 105 | 110 |     |
| Gly Asp Leu Thr Asn Leu Thr Glu Leu Gln Leu Arg Asn Asn Ser Ile |     |     |     |
| 115   | 120 | 125 |     |
| Arg Thr Leu Asp Arg Asp Leu Leu Arg His Ser Pro Leu Leu Arg His |     |     |     |
| 130   | 135 | 140 |     |
| Leu Asp Leu Ser Ile Asn Gly Leu Ala Gln Leu Pro Pro Gly Leu Phe |     |     |     |
| 145   | 150 | 155 | 160 |
| Asp Gly Leu Leu Ala Leu Arg Ser Leu Ser Leu Arg Ser Asn Arg Leu |     |     |     |
| 165   | 170 | 175 |     |
| Gln Asn Leu Asp Arg Leu Thr Phe Glu Pro Leu Ala Asn Leu Gln Leu |     |     |     |
| 180   | 185 | 190 |     |
| Leu Gln Val Gly Asp Asn Pro Trp Glu Cys Asp Cys Asn Leu Arg Glu |     |     |     |
| 195   | 200 | 205 |     |
| Phe Lys His Trp Met Glu Trp Phe Ser Tyr Arg Gly Gly Arg Leu Asp |     |     |     |
| 210   | 215 | 220 |     |
| Gln Leu Ala Cys Thr Leu Pro Lys Glu Leu Arg Gly Lys Asp Met Arg |     |     |     |
| 225   | 230 | 235 | 240 |

Met Val Pro Met Glu Met Phe Asn Tyr Cys Ser Gln Leu Glu Asp Glu  
 245 250 255  
 Asn Ser Ser Ala Gly Leu Asp Ile Pro Gly Pro Pro Cys Thr Lys Ala  
 260 265 270  
 Ser Pro Glu Pro Ala Lys Pro Lys Pro Gly Ala Glu Pro Glu Pro Glu  
 275 280 285  
 Pro Ser Thr Ala Cys Pro Gln Lys Gln Arg His Arg Pro Ala Ser Val  
 290 295 300  
 Arg Arg Ala Met Gly Thr Val Ile Ile Ala Gly Val Val Cys Gly Val  
 305 310 315 320  
 Val Cys Ile Met Met Val Val Ala Ala Ala Tyr Gly Cys Ile Tyr Ala  
 325 330 335  
 Ser Leu Met Ala Lys Tyr His Arg Glu Leu Lys Lys Arg Gln Pro Leu  
 340 345 350  
 Met Gly Asp Pro Glu Gly Glu His Glu Asp Gln Lys Gln Ile Ser Ser  
 355 360 365  
 Val Ala  
 370

&lt;210&gt; 2492

&lt;211&gt; 158

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2492

Met Glu Lys Gly Leu Arg Arg Thr Gln Gln Cys Gly Ser Ala Thr Ala  
 1 5 10 15  
 Gly Asn His Glu Thr Glu Thr Ala Arg Trp Arg Gln Pro Asp Thr Lys

|   |     |  |     |  |     |
|---|-----|--|-----|--|-----|
|   | 20  |  | 25  |  | 30  |
| Leu Gly Thr Gln Thr Pro Arg Phe Pro Pro Trp Pro His Pro Trp Ala |     |  |     |  |     |
|   | 35  |  | 40  |  | 45  |
| Lys Ser Asn Ser Glu Pro Ser Ser Ser Ser Ile Ser Phe Asn Pro His |     |  |     |  |     |
|   | 50  |  | 55  |  | 60  |
| Arg Gly Cys Leu Leu Phe Thr Ala Val Glu Val Arg Val Gly Val Gly |     |  |     |  |     |
|   | 65  |  | 70  |  | 75  |
| Gly Met Leu Phe Ser Cys Arg Leu Ser Ser Trp Asp Glu Glu Thr Ser |     |  |     |  |     |
|   | 85  |  | 90  |  | 95  |
| Ser Leu Leu Gly Leu Ala Gly Pro Ala Lys Gln Met His Thr Leu Thr |     |  |     |  |     |
|   | 100 |  | 105 |  | 110 |
| Thr Ala Gln Gly Leu Arg Gln Val Cys Ser Leu Ser Lys Thr Cys Pro |     |  |     |  |     |
|   | 115 |  | 120 |  | 125 |
| Gly Phe Ser Lys Gly Lys Ser Ile Arg Lys Arg Met Glu Asn Leu Tyr |     |  |     |  |     |
|   | 130 |  | 135 |  | 140 |
| Ser Phe Ile Leu Leu Pro Ser Asn Gly His Ser Pro Met Tyr         |     |  |     |  |     |
|   | 145 |  | 150 |  | 155 |

&lt;210&gt; 2493

&lt;211&gt; 156

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2493

|   |    |    |    |
|---|----|----|----|
| Met Ala Asp Val Pro His Pro Thr Lys Leu Glu His Pro Arg Ser Thr |    |    |    |
|   | 1  | 5  | 10 |
|   |    |    | 15 |
| Ser Asp Cys Cys Pro Ser Ser Glu Asn Phe Lys Pro Val Asp Phe Arg |    |    |    |
|   | 20 | 25 | 30 |

Leu Leu Gly Ser Val Gly Val Gly Pro Thr Asp Pro Asp His Leu Ala  
                   35                                  40                                  45  
 Pro Trp Leu Gln Pro Pro Phe Gln Glu Ser Glu Arg Phe Cys His Thr  
                   50                                  55                                  60  
 Gly Ile Pro Gly Ala Thr Gly Val Leu Arg Lys Lys Gln Lys Gln Lys  
                   65                                  70                                  75                                  80  
 Leu Leu Gln Leu Ala Gln Cys Leu Pro Lys Gln Pro Pro Cys Phe Val  
                                   85                                  90                                  95  
 Leu Glu Thr Gln Asn His Gly Gly Ile Asp Thr Trp Ser Trp Ser Ala  
                                   100                                  105                                  110  
 Ser Cys Lys Asp Arg Gly Lys Ser Thr Val Ser Glu Pro Glu Cys Thr  
                                   115                                  120                                  125  
 Val Pro Pro Gly Thr Leu Ser His Ser Phe Pro Trp Leu Gly Lys Gly  
                   130                                  135                                  140  
 Asp Pro Pro Thr Pro Cys Thr Ser Gln Val Arg Arg  
                   145                                  150                                  155

&lt;210&gt; 2494

&lt;211&gt; 919

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2494

Met Ala Pro Ser Arg Phe Arg Thr Gln Leu Glu Leu Val Ser Asn Val  
           1                                  5                                  10                                  15  
 Leu Ile Phe Ser Cys Thr Asn Ile Val Gly Val Cys Thr His Tyr Pro  
                                   20                                  25                                  30  
 Ala Glu Val Ser Gln Arg Gln Ala Phe Gln Glu Thr Arg Glu Cys Ile

|   |     |     |
|---|-----|-----|
| 35  | 40  | 45  |
| Gln Ala Arg Leu His Ser Gln Arg Glu Asn Gln Gln Gln Glu Arg Leu |     |     |
| 50  | 55  | 60  |
| Leu Leu Ser Val Leu Pro Arg His Val Ala Met Glu Met Lys Ala Asp |     |     |
| 65  | 70  | 75  |
| Ile Asn Ala Lys Gln Glu Asp Met Met Phe His Lys Ile Tyr Ile Gln |     |     |
| 85  | 90  | 95  |
| Lys His Asp Asn Val Ser Ile Leu Phe Ala Asp Ile Glu Gly Phe Thr |     |     |
| 100   | 105 | 110 |
| Ser Leu Ala Ser Gln Cys Thr Ala Gln Glu Leu Val Met Thr Leu Asn |     |     |
| 115   | 120 | 125 |
| Glu Leu Phe Ala Arg Phe Asp Lys Leu Ala Ala Glu Asn His Cys Leu |     |     |
| 130   | 135 | 140 |
| Arg Ile Lys Ile Leu Gly Asp Cys Tyr Tyr Cys Val Ser Gly Leu Pro |     |     |
| 145   | 150 | 155 |
| Glu Ala Arg Ala Asp His Ala His Cys Cys Val Glu Met Gly Met Asp |     |     |
| 165   | 170 | 175 |
| Met Ile Glu Ala Ile Ser Leu Val Arg Glu Val Thr Gly Val Asn Val |     |     |
| 180   | 185 | 190 |
| Asn Met Arg Val Gly Ile His Ser Gly Arg Val His Cys Gly Val Leu |     |     |
| 195   | 200 | 205 |
| Gly Leu Arg Lys Trp Gln Phe Asp Val Trp Ser Asn Asp Val Thr Leu |     |     |
| 210   | 215 | 220 |
| Ala Asn His Met Glu Ala Gly Gly Lys Ala Gly Arg Ile His Ile Thr |     |     |
| 225   | 230 | 235 |
| Lys Ala Thr Leu Asn Tyr Leu Asn Gly Asp Tyr Glu Val Glu Pro Gly |     |     |
| 245   | 250 | 255 |
| Cys Gly Gly Glu Arg Asn Ala Tyr Leu Lys Glu His Ser Ile Glu Thr |     |     |
| 260   | 265 | 270 |

Phe Leu Ile Leu Arg Cys Thr Gln Lys Arg Lys Glu Glu Lys Ala Met  
275 280 285  
Ile Ala Lys Met Asn Arg Gln Arg Thr Asn Ser Ile Gly His Asn Pro  
290 295 300  
Pro His Trp Gly Ala Glu Arg Pro Phe Tyr Asn His Leu Gly Gly Asn  
305 310 315 320  
Gln Val Ser Lys Glu Met Lys Arg Met Gly Phe Glu Asp Pro Lys Asp  
325 330 335  
Lys Asn Ala Gln Glu Ser Ala Asn Pro Glu Asp Glu Val Asp Glu Phe  
340 345 350  
Leu Gly Arg Ala Ile Asp Ala Arg Ser Ile Asp Arg Leu Arg Ser Glu  
355 360 365  
His Val Arg Lys Phe Leu Leu Thr Phe Arg Glu Pro Asp Leu Glu Lys  
370 375 380  
Lys Tyr Ser Lys Gln Val Asp Asp Arg Phe Gly Ala Tyr Val Ala Cys  
385 390 395 400  
Ala Ser Leu Val Phe Leu Phe Ile Cys Phe Val Gln Ile Thr Ile Val  
405 410 415  
Pro His Ser Ile Phe Met Leu Ser Phe Tyr Leu Thr Cys Ser Leu Leu  
420 425 430  
Leu Thr Leu Val Val Phe Val Ser Val Ile Tyr Ser Cys Val Lys Leu  
435 440 445  
Phe Pro Ser Pro Leu Gln Thr Leu Ser Arg Lys Ile Val Arg Ser Lys  
450 455 460  
Met Asn Ser Thr Leu Val Gly Val Phe Thr Ile Thr Leu Val Phe Leu  
465 470 475 480  
Ala Ala Phe Val Asn Met Phe Thr Cys Asn Ser Arg Asp Leu Leu Gly  
485 490 495  
Cys Leu Ala Gln Glu His Asn Ile Ser Ala Ser Gln Val Asn Ala Cys

500 505 510  
His Val Ala Glu Ser Ala Val Asn Tyr Ser Leu Gly Asp Glu Gln Gly  
515 520 525  
Phe Cys Gly Ser Pro Trp Pro Asn Cys Asn Phe Pro Glu Tyr Phe Thr  
530 535 540  
Tyr Ser Val Leu Leu Ser Leu Leu Ala Cys Ser Val Phe Leu Gln Ile  
545 550 555 560  
Ser Cys Ile Gly Lys Leu Val Leu Met Leu Ala Ile Glu Leu Ile Tyr  
565 570 575  
Val Leu Ile Val Glu Val Pro Gly Val Thr Leu Phe Asp Asn Ala Asp  
580 585 590  
Leu Leu Val Thr Ala Asn Ala Ile Asp Phe Phe Asn Asn Gly Thr Ser  
595 600 605  
Gln Trp Ser Leu Cys Glu Asn Leu Arg His Arg Arg Met Glu Ala Gly  
610 615 620  
Thr Tyr Phe Pro Ser Gly Val Lys Glu Gln Ser Pro Glu His Ala Thr  
625 630 635 640  
Lys Val Ala Leu Lys Val Val Thr Pro Ile Ile Ile Ser Val Phe Val  
645 650 655  
Leu Ala Leu Tyr Leu His Ala Gln Gln Val Glu Ser Thr Ala Arg Leu  
660 665 670  
Asp Phe Leu Trp Lys Leu Gln Ala Thr Glu Glu Lys Glu Glu Met Glu  
675 680 685  
Glu Leu Gln Ala Tyr Asn Arg Arg Leu Leu His Asn Ile Leu Pro Lys  
690 695 700  
Asp Val Ala Ala His Phe Leu Ala Arg Glu Arg Arg Asn Asp Glu Leu  
705 710 715 720  
Tyr Tyr Gln Ser Cys Glu Cys Val Ala Val Met Phe Ala Ser Ile Ala  
725 730 735



Asn Phe Ser Glu Phe Tyr Val Glu Leu Glu Ala Asn Asn Glu Gly Val  
740 745 750  
Glu Cys Leu Arg Leu Leu Asn Glu Ile Ile Ala Asp Phe Asp Glu Ile  
755 760 765  
Ile Ser Glu Asp Arg Phe Arg Gln Leu Glu Lys Ile Lys Thr Ile Gly  
770 775 780  
Ser Thr Tyr Met Ala Ala Ser Gly Leu Asn Asp Ser Thr Tyr Asp Lys  
785 790 795 800  
Val Gly Lys Thr His Ile Lys Ala Leu Ala Asp Phe Ala Met Lys Leu  
805 810 815  
Met Asp Gln Met Lys Tyr Ile Asn Glu His Ser Phe Asn Asn Phe Gln  
820 825 830  
Met Lys Ile Gly Leu Asn Ile Gly Pro Val Val Ala Gly Val Ile Gly  
835 840 845  
Ala Arg Lys Pro Gln Tyr Asp Ile Trp Gly Asn Thr Val Asn Val Ala  
850 855 860  
Ser Arg Met Asp Ser Thr Gly Val Pro Asp Arg Ile Gln Val Thr Thr  
865 870 875 880  
Asp Met Tyr Gln Val Leu Ala Ala Asn Thr Tyr Gln Leu Glu Cys Arg  
885 890 895  
Gly Val Val Lys Val Lys Gly Lys Gly Glu Met Met Thr Tyr Phe Leu  
900 905 910  
Asn Gly Gly Pro Pro Leu Ser  
915

&lt;210&gt; 2495

&lt;211&gt; 239

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2495

|     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| Met | Gly | Tyr | Val | Arg | Glu | Tyr | Ile | Leu | Trp | Ala | Ala | Ser | Lys | Ser | Gln |
| 1   |     |     |     | 5   |     |     |     | 10  |     |     |     |     | 15  |     |     |
| Leu | Leu | Ala | His | Gln | Phe | Ile | Trp | Asn | Met | Lys | Thr | Asn | Ile | Tyr | Leu |
|     |     |     | 20  |     |     |     |     | 25  |     |     |     |     | 30  |     |     |
| Asp | Glu | Glu | Gly | His | Gln | Lys | Asp | Pro | Asp | Ile | Gly | Asp | Leu | Leu | Asp |
|     |     |     | 35  |     |     |     |     | 40  |     |     |     |     | 45  |     |     |
| Gln | Leu | Val | Glu | Glu | Ile | Thr | Gly | Ser | Leu | Ser | Gly | Pro | Ala | Lys | Asp |
|     |     | 50  |     |     |     |     |     | 55  |     |     |     |     | 60  |     |     |
| Phe | Tyr | Gln | Arg | Glu | Phe | Asp | Phe | Phe | Asn | Lys | Ile | Thr | Asn | Val | Ser |
|     |     | 65  |     |     |     | 70  |     |     |     |     | 75  |     |     |     | 80  |
| Ala | Ile | Ile | Lys | Pro | Tyr | Pro | Lys | Gly | Asp | Glu | Arg | Lys | Lys | Ala | Cys |
|     |     |     |     |     |     | 85  |     |     |     |     | 90  |     |     |     | 95  |
| Leu | Ser | Ala | Leu | Ser | Glu | Val | Lys | Val | Gln | Pro | Gly | Cys | Tyr | Leu | Pro |
|     |     |     | 100 |     |     |     |     |     |     | 105 |     |     |     | 110 |     |
| Ser | Asn | Pro | Glu | Ala | Ile | Val | Leu | Asp | Ile | Asp | Tyr | Lys | Ser | Gly | Thr |
|     |     |     | 115 |     |     |     |     |     |     | 120 |     |     |     | 125 |     |
| Pro | Met | Gln | Ser | Ala | Ala | Lys | Ala | Pro | Tyr | Leu | Ala | Lys | Phe | Lys | Val |
|     |     |     | 130 |     |     |     | 135 |     |     |     |     |     | 140 |     |     |
| Lys | Arg | Cys | Gly | Val | Ser | Glu | Leu | Glu | Lys | Glu | Gly | Leu | Arg | Cys | Arg |
|     |     | 145 |     |     |     |     | 150 |     |     |     |     | 155 |     |     | 160 |
| Ser | Asp | Ser | Glu | Asp | Glu | Cys | Ser | Thr | Gln | Glu | Ala | Asp | Gly | Gln | Lys |
|     |     |     |     |     | 165 |     |     |     |     |     |     | 170 |     |     | 175 |
| Ile | Ser | Trp | Gln | Ala | Ala | Ile | Phe | Lys | Val | Gly | Asp | Asp | Cys | Arg | Gln |
|     |     |     | 180 |     |     |     |     |     |     | 185 |     |     |     | 190 |     |
| Val | Ser | Arg | Val | Arg | Pro | Arg | Val | Gly | Leu | Gly | Thr | Gly | Leu | Ala | Ala |
|     |     |     | 195 |     |     |     |     |     |     | 200 |     |     |     | 205 |     |

Pro Gln Gly Ser Arg Pro Ala Arg Val Gln Ser His Met Gln Lys Cys

210

215

220

Glu Ser Phe Pro Ser Leu Ile Trp Phe Arg Cys His Gly Val Asn

225

230

235

<210> 2496

<211> 206

<212> PRT

<213> Homo sapiens

<400> 2496

Met Pro Pro Ala Leu Ser Ser Arg Ser Cys Thr Glu Leu Gly Ala Thr

1

5

10

15

Ser Cys Thr Glu Thr Ser Arg Val Ala Arg Ser Cys Thr Thr Gln Ser

20

25

30

Ala Leu Ala Ala Arg Met Trp Ser Ala Thr Cys Trp Thr Thr Pro Pro

35

40

45

Gln Arg Ser Leu Met Arg Trp Arg Lys Ser Lys Tyr Leu Gly Ser Ala

50

55

60

Glu Pro Trp Ser Pro Arg Lys Pro Pro Phe Ser Pro Pro Leu Pro Phe

65

70

75

80

Cys Gln Val Arg Ala His Lys Leu Pro Gly His Ile Cys His Pro Leu

85

90

95

Gly His Pro Tyr Cys Pro Arg Ala Leu Asn Phe Leu Pro Phe Leu Met

100

105

110

Ala Leu Gly Arg Gln Met Gly Gly Ser Gly Asp Gly Met Gly Tyr Thr

115

120

125

Ala Ser Pro Cys Ser Pro Ser Gly Glu Thr Cys Leu His Gln Ala Ala

|   |     |     |     |
|---|-----|-----|-----|
| 130   | 135 | 140 |     |
| Ala Leu Gly Gln Arg Thr Ile Cys His Tyr Ile Val Glu Ala Gly Ala |     |     |     |
| 145   | 150 | 155 | 160 |
| Ser Leu Met Lys Thr Asp Gln Gln Gly Asp Thr Pro Arg Gln Arg Ala |     |     |     |
|   | 165 | 170 | 175 |
| Glu Lys Ala Gln Asp Thr Glu Leu Ala Ala Tyr Leu Glu Asn Arg Gln |     |     |     |
|   | 180 | 185 | 190 |
| His Tyr Gln Met Ile Gln Arg Glu Asp Gln Glu Thr Ala Val         |     |     |     |
|   | 195 | 200 | 205 |

&lt;210&gt; 2497

&lt;211&gt; 126

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2497

|   |    |    |    |
|---|----|----|----|
| Met Leu Pro Thr Lys Glu Gly Ser Gln Ser Gly Tyr Asn Gln Trp Leu |    |    |    |
| 1   | 5  | 10 | 15 |
| Pro Phe Asp Glu Arg Ala Gln Glu Leu Arg Trp Glu Ala Trp Ser Thr |    |    |    |
|   | 20 | 25 | 30 |
| Lys Phe His Leu Lys Ala Glu Arg Glu Glu Phe Lys Val Gln Ile Asp |    |    |    |
|   | 35 | 40 | 45 |
| Leu Arg Glu Cys Gln Ala Tyr Ser Ser Pro Met Glu Ser Pro Gln Pro |    |    |    |
|   | 50 | 55 | 60 |
| Val Val Met Gly Glu Ala Pro Gln Ile Val Val Trp Cys Leu Gln Ala |    |    |    |
|   | 65 | 70 | 75 |
| Pro Gly Leu Cys His Pro Asp Leu Ser Ile Gly Val His Leu Leu Val |    |    |    |
|   | 85 | 90 | 95 |

Thr Lys Tyr Lys Ser Arg Asp Trp Asp Gly Arg Gly Glu Pro Asn Arg

100

105

110

Ser Ser Phe Arg Ser Ala Glu Ala Ala Ala Phe Ala Ser Gln

115

120

125

<210> 2498

<211> 393

<212> PRT

<213> Homo sapiens

<400> 2498

Met Arg Thr Leu Phe Asn Leu Leu Trp Leu Ala Leu Ala Cys Ser Pro

1

5

10

15

Val His Thr Thr Leu Ser Lys Ser Asp Ala Lys Lys Ala Ala Ser Lys

20

25

30

Thr Leu Leu Glu Lys Ser Gln Phe Ser Asp Lys Pro Val Gln Asp Arg

35

40

45

Gly Leu Val Val Thr Asp Leu Lys Ala Glu Ser Val Val Leu Glu His

50

55

60

Arg Ser Tyr Cys Ser Ala Lys Ala Arg Asp Arg His Phe Ala Gly Asp

65

70

75

80

Val Leu Gly Tyr Val Thr Pro Trp Asn Ser His Gly Tyr Asp Val Thr

85

90

95

Lys Val Phe Gly Ser Lys Phe Thr Gln Ile Ser Pro Val Trp Leu Gln

100

105

110

Leu Lys Arg Arg Gly Arg Glu Met Phe Glu Val Thr Gly Leu His Asp

115

120

125

Val Asp Gln Gly Trp Met Arg Ala Val Arg Lys His Ala Lys Gly Leu

130 135 140  
His Ile Val Pro Arg Leu Leu Phe Glu Asp Trp Thr Tyr Asp Asp Phe  
145 150 155 160  
Arg Asn Val Leu Asp Ser Glu Asp Glu Ile Glu Glu Leu Ser Lys Thr  
165 170 175  
Val Val Gln Val Ala Lys Asn Gln His Phe Asp Gly Phe Val Val Glu  
180 185 190  
Val Trp Asn Gln Leu Leu Ser Gln Lys Arg Val Gly Leu Ile His Met  
195 200 205  
Leu Thr His Leu Ala Glu Ala Leu His Gln Ala Arg Leu Leu Ala Leu  
210 215 220  
Leu Val Ile Pro Pro Ala Ile Thr Pro Gly Thr Asp Gln Leu Gly Met  
225 230 235 240  
Phe Thr His Lys Glu Phe Glu Gln Leu Ala Pro Val Leu Asp Gly Phe  
245 250 255  
Ser Leu Met Thr Tyr Asp Tyr Ser Thr Ala His Gln Pro Gly Pro Asn  
260 265 270  
Ala Pro Leu Ser Trp Val Arg Ala Cys Val Gln Val Leu Asp Pro Lys  
275 280 285  
Ser Lys Trp Arg Ser Lys Ile Leu Leu Gly Leu Asn Phe Tyr Gly Met  
290 295 300  
Asp Tyr Ala Thr Ser Lys Asp Ala Arg Glu Pro Val Val Gly Ala Arg  
305 310 315 320  
Tyr Ile Gln Thr Leu Lys Asp His Arg Pro Arg Met Val Trp Asp Ser  
325 330 335  
Gln Val Ser Glu His Phe Phe Glu Tyr Lys Lys Ser Arg Ser Gly Arg  
340 345 350  
His Val Val Phe Tyr Pro Thr Leu Lys Ser Leu Gln Val Arg Leu Glu  
355 360 365

Leu Ala Arg Glu Leu Gly Val Gly Val Ser Ile Trp Glu Leu Gly Gln

370

375

380

Gly Leu Asp Tyr Phe Tyr Asp Leu Leu

385

390

<210> 2499

<211> 333

<212> PRT

<213> Homo sapiens

<400> 2499

Met Met Ser Pro Ser Lys Leu Leu Ile Ser Arg Gly Ser Ala Leu Thr

1

5

10

15

Gln Val Trp Leu Thr Ala Ala Ile Leu Gly Gln Val Gly Ala Glu Gln

20

25

30

Ser Ala Trp Lys Gly Asp Leu Tyr Gly Arg Gln Leu Trp Glu Gly Trp

35

40

45

Cys Trp Cys Trp Ser Ser Gln Ala Pro Tyr Ser Leu Leu Met Pro Phe

50

55

60

Ser Arg Leu Pro Gly Asp Leu Val Lys His His Ile Asp Ile Ile Leu

65

70

75

80

Asn Gln Arg Asn Tyr Met Ala Ala Thr Leu Lys Ile Ile Glu Arg Asn

85

90

95

Phe Pro Glu Leu Leu Ser Leu Asn Leu Cys Asp Asn Lys Leu Tyr His

100

105

110

Leu Asp Gly Leu Pro Asp Ile Ile Glu Lys Ala Pro Lys Val Lys Thr

115

120

125

Leu Asn Leu Ser Lys Asn Lys Leu Lys Ser Ala Trp Glu Leu Gly Lys

130 135 140  
Val Lys Gly Leu Lys Leu Glu Glu Leu Trp Leu Glu Gly Asn Ser Leu  
145 150 155 160  
Cys Ser Thr Phe Ser Asp Gln Ser Ala Tyr Val Ser Ile Ile Arg Glu  
165 170 175  
Tyr Phe Pro Lys Leu Leu Cys Leu Asp Gly Gln Glu Leu Ala Ser Pro  
180 185 190  
Ile Ile Ile Gly Ile Glu Ala Pro Glu Ile Ile Lys Pro Cys Lys Glu  
195 200 205  
Ser Tyr Lys Gly Ser Glu Thr Ile Lys Ser Leu Val Leu Gln Phe Leu  
210 215 220  
Leu Gln Tyr Tyr Leu Ile Tyr Asp Ser Glu Asp Arg Thr Gly Leu Leu  
225 230 235 240  
Ser Val Tyr His Asp Lys Ala Cys Phe Ser Leu Thr Ile Thr Leu Asn  
245 250 255  
Pro Glu Asp Pro Glu Pro Ser Ser Leu Glu Lys Tyr Phe Lys Asp Ser  
260 265 270  
Arg Asn Ile Lys Asn Ile Lys Asp Pro Cys Leu Arg Ile Gln Leu Leu  
275 280 285  
Lys His Thr Lys Arg Glu Ile Val Asp Ser Leu Ser Val Leu Pro Arg  
290 295 300  
Thr Gln His Asp Leu Asn Ser Tyr Val Val Asp Leu Cys Ile Gln Thr  
305 310 315 320  
Val Ser Thr Cys Phe Leu Pro Gln Ser Gly Pro Glu Ser  
325 330

&lt;210&gt; 2500

&lt;211&gt; 294



&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2500

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Met Ser Leu Gly Gly His Pro Asn Asn Val Val Ser Val Lys Tyr Cys
  1             5             10             15
Asn Tyr Thr Ser Leu Val Phe Thr Val Ser Thr Ser Tyr Ile Lys Val
      20             25             30
Trp Asp Ile Arg Asp Ser Ala Lys Cys Ile Arg Thr Leu Thr Ser Ser
      35             40             45
Gly Gln Val Thr Leu Gly Asp Ala Cys Ser Ala Ser Thr Ser Arg Thr
      50             55             60
Val Ala Ile Pro Ser Gly Glu Asn Gln Ile Asn Gln Ile Ala Leu Asn
      65             70             75             80
Pro Thr Gly Thr Phe Leu Tyr Ala Ala Ser Gly Asn Ala Val Arg Met
      85             90             95
Trp Asp Leu Lys Arg Phe Gln Ser Thr Gly Lys Leu Thr Gly His Leu
      100            105            110
Gly Pro Val Met Cys Leu Thr Val Asp Gln Ile Ser Ser Gly Gln Asp
      115            120            125
Leu Ile Ile Thr Gly Ser Lys Asp His Tyr Ile Lys Met Phe Asp Val
      130            135            140
Thr Glu Gly Ala Leu Gly Thr Val Ser Pro Thr His Asn Phe Glu Pro
      145            150            155            160
Pro His Tyr Asp Gly Ile Glu Ala Leu Thr Ile Gln Gly Asp Asn Leu
      165            170            175
Phe Ser Gly Ser Arg Asp Asn Gly Ile Lys Lys Trp Asp Leu Thr Gln
      180            185            190
Lys Asp Leu Leu Gln Gln Val Pro Asn Ala His Lys Asp Trp Val Cys

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|   |     |     |
|---|-----|-----|
| 195   | 200 | 205 |
| Ala Leu Gly Val Val Pro Asp His Pro Val Leu Leu Ser Gly Cys Arg |     |     |
| 210   | 215 | 220 |
| Gly Gly Ile Leu Lys Val Trp Asn Met Asp Thr Phe Met Pro Val Gly |     |     |
| 225   | 230 | 235 |
| Glu Met Lys Gly His Asp Ser Pro Ile Asn Ala Ile Cys Val Asn Ser |     |     |
| 245   | 250 | 255 |
| Thr His Ile Phe Thr Ala Ala Asp Asp Arg Thr Val Arg Ile Trp Lys |     |     |
| 260   | 265 | 270 |
| Ala Arg Asn Leu Gln Asp Gly Gln Ile Ser Asp Thr Gly Asp Leu Gly |     |     |
| 275   | 280 | 285 |
| Glu Asp Ile Ala Ser Asn   |     |     |
| 290   |     |     |

&lt;210&gt; 2501

&lt;211&gt; 130

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2501

|   |
|---|
| Met Ile Thr Ala Ile Leu Leu Gly Phe Leu Gly Leu Leu Leu Gly Ile |
| 1 5 10 15   |
| Ala Gly Leu Arg Cys Thr Asn Ile Gly Gly Leu Glu Leu Ser Arg Lys |
| 20 25 30  |
| Ala Lys Leu Ala Ala Thr Ala Gly Ala Leu His Ile Leu Ala Gly Asn |
| 35 40 45  |
| Trp Gly Lys Val Met Gly Arg Gly Ser Pro Ser Thr Ala Asp Phe Arg |
| 50 55 60  |

Leu Leu Cys Pro His Leu Ile Ser Ser Pro Ile Pro Thr Pro His Ala  
 65 70 75 80  
 His Leu Pro Tyr Pro Ala Ala Trp Thr Pro Ala His Pro Cys Leu Ile  
 85 90 95  
 Cys Thr Pro Gln Ile Ser Trp Leu Gln Ile Ser Pro Ser Ala Val Phe  
 100 105 110  
 Leu Glu Leu Pro Val Gly Ala Gly His Gly Gln Val Trp Glu Gly Leu  
 115 120 125  
 Arg Arg  
 130

<210> 2502

<211> 100

<212> PRT

<213> Homo sapiens

<400> 2502

Met Asp Ser Gln Phe His Met Ala Gly Glu Thr Ser Gln Ser Trp Gln  
 1 5 10 15  
 Lys Ala Lys Ile Arg Ser Tyr Thr Ala Ala Asp Glu Arg Ala Cys Val  
 20 25 30  
 Gly Glu Leu Pro Ser Ile Gln Pro Ser Asp Leu Met Arg Leu Ile His  
 35 40 45  
 Tyr His Lys Asn Asn Thr Val Leu Met Ile Gln Leu Pro Pro Pro Arg  
 50 55 60  
 Phe Leu Pro Gln Tyr Val Gly Ile Met Gly Thr Thr Ile Arg Asp Leu  
 65 70 75 80  
 Gly Glu Asp Thr Ala Lys Pro Tyr Gln Ser His Asn Lys Asp Gln Arg

85

90

95

Pro Ser Leu Pro

100

&lt;210&gt; 2503

&lt;211&gt; 159

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2503

Met Asn Gly Gly Thr Ser Leu His Gln Lys Cys Gln Leu Lys Pro Arg

1

5

10

15

Gly Ser Phe Phe Ser Val Ala Leu Arg Glu Arg Pro Arg Glu Ser His

20

25

30

Gly Val Phe Pro Phe Gln Phe Arg Ser Thr Pro Arg Ala Val Thr Val

35

40

45

Ser Pro Pro Phe Leu Pro Gly Glu Lys Lys Val Leu Gly Val Pro Ser

50

55

60

Ala Gly Gln Arg Lys Asn Ser Pro Phe Phe Ala Pro Val Pro Lys Gly

65

70

75

80

Ser Phe Cys Phe His Phe His Leu Ser His Gly Arg Arg Pro Ala Gly

85

90

95

Val Gln Phe Ala Asp Pro Thr Ser Pro Met Met Pro Asn Ser Ile Leu

100

105

110

Thr Val Ser His Val Ala Leu Ser Val Leu Gly Thr Gly Glu Ser Leu

115

120

125

Trp Ala Met Ile Leu Gly Trp Thr Gly Val Pro Trp Ala Pro Leu Pro

130

135

140

Pro Ser Phe Pro Gln Ser Met Thr Arg Gln Pro Phe Pro Val Thr  
 145 150 155

<210> 2504

<211> 119

<212> PRT

<213> Homo sapiens

<400> 2504

Met His Val Thr Val Gln Thr Gln Leu His Ser Gly Lys Glu Pro Ala  
 1 5 10 15  
 Ser Phe Leu Leu Leu Ser Cys Cys Ala Gln Glu Val Ala Ser Val Phe  
 20 25 30  
 Glu Ser Asn Val Ala Ala Leu Ala Pro Ala Ile Ile Ser Ile Leu Gln  
 35 40 45  
 Gln Val Ala Ser Gly Lys Lys Lys Gly Arg Ala Tyr Ala Phe His Phe  
 50 55 60  
 Arg Asp Thr Trp Pro Ser Ala Ala His Ile Thr Leu Leu Thr Leu Cys  
 65 70 75 80  
 Trp Asp Gln Ser Leu Val Thr Trp Gln Gln Ile Ala Val Arg Asn Ile  
 85 90 95  
 Gly Lys Gly Cys Leu Trp Leu Leu Gly Leu Met Thr Ile Gly Asn Cys  
 100 105 110  
 Cys Thr Thr Lys Gly Gly Phe  
 115

<210> 2505

&lt;211&gt; 583

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2505

Met Leu Ala Ile Gly Ser Leu Asp His Ala His Ile Val Arg Leu Leu

1 5 10 15

Gly Leu Cys Pro Gly Ser Ser Leu Gln Leu Val Thr Gln Tyr Leu Pro

20 25 30

Leu Gly Ser Leu Leu Asp His Val Arg Gln His Arg Gly Ala Leu Gly

35 40 45

Pro Gln Leu Leu Leu Asn Trp Gly Val Gln Ile Ala Lys Gly Met Tyr

50 55 60

Tyr Leu Glu Glu His Gly Met Val His Arg Asn Leu Ala Ala Arg Asn

65 70 75 80

Val Leu Leu Lys Ser Pro Ser Gln Val Gln Val Ala Asp Phe Gly Val

85 90 95

Ala Asp Leu Leu Pro Pro Asp Asp Lys Gln Leu Leu Tyr Ser Glu Ala

100 105 110

Lys Thr Pro Ile Lys Trp Met Ala Leu Glu Ser Ile His Phe Gly Lys

115 120 125

Tyr Thr His Gln Ser Asp Val Trp Ser Tyr Gly Val Thr Val Trp Glu

130 135 140

Leu Met Thr Phe Gly Ala Glu Pro Tyr Ala Gly Leu Arg Leu Ala Glu

145 150 155 160

Val Pro Asp Leu Leu Glu Lys Gly Glu Arg Leu Ala Gln Pro Gln Ile

165 170 175

Cys Thr Ile Asp Val Tyr Met Val Met Val Lys Cys Trp Met Ile Asp

180 185 190

Glu Asn Ile Arg Pro Thr Phe Lys Glu Leu Ala Asn Glu Phe Thr Arg  
 195 200 205  
 Met Ala Arg Asp Pro Pro Arg Tyr Leu Val Ile Lys Arg Glu Ser Gly  
 210 215 220  
 Pro Gly Ile Ala Pro Gly Pro Glu Pro His Gly Leu Thr Asn Lys Lys  
 225 230 235 240  
 Leu Glu Glu Val Glu Leu Glu Pro Glu Leu Asp Leu Asp Leu Asp Leu  
 245 250 255  
 Glu Ala Glu Glu Asp Asn Leu Ala Thr Thr Thr Leu Gly Ser Ala Leu  
 260 265 270  
 Ser Leu Pro Val Gly Thr Leu Asn Arg Pro Arg Gly Ser Gln Ser Leu  
 275 280 285  
 Leu Ser Pro Ser Ser Gly Tyr Met Pro Met Asn Gln Gly Asn Leu Gly  
 290 295 300  
 Glu Ser Cys Gln Glu Ser Ala Val Ser Gly Ser Ser Glu Arg Cys Pro  
 305 310 315 320  
 Arg Pro Val Ser Leu His Pro Met Pro Arg Gly Cys Leu Ala Ser Glu  
 325 330 335  
 Ser Ser Glu Gly His Val Thr Gly Ser Glu Ala Glu Leu Gln Glu Lys  
 340 345 350  
 Val Ser Met Cys Arg Ser Arg Ser Arg Ser Arg Ser Pro Arg Pro Arg  
 355 360 365  
 Gly Asp Ser Ala Tyr His Ser Gln Arg His Ser Leu Leu Thr Pro Val  
 370 375 380  
 Thr Pro Leu Ser Pro Pro Gly Leu Glu Glu Glu Asp Val Asn Gly Tyr  
 385 390 395 400  
 Val Met Pro Asp Thr His Leu Lys Gly Thr Pro Ser Ser Arg Glu Gly  
 405 410 415  
 Thr Leu Ser Ser Val Gly Leu Ser Ser Val Leu Gly Thr Glu Glu Glu

420 425 430  
Asp Glu Asp Glu Glu Tyr Glu Tyr Met Asn Arg Arg Arg Arg His Ser  
435 440 445  
Pro Pro His Pro Pro Arg Pro Ser Ser Leu Glu Glu Leu Gly Tyr Glu  
450 455 460  
Tyr Met Asp Val Gly Ser Asp Leu Ser Ala Ser Leu Gly Ser Thr Gln  
465 470 475 480  
Ser Cys Pro Leu His Pro Val Pro Ile Met Pro Thr Ala Gly Thr Thr  
485 490 495  
Pro Asp Glu Asp Tyr Glu Tyr Met Asn Arg Gln Arg Asp Gly Gly Gly  
500 505 510  
Pro Gly Gly Asp Tyr Ala Ala Met Gly Ala Cys Pro Ala Ser Glu Gln  
515 520 525  
Gly Tyr Glu Glu Met Arg Ala Phe Gln Gly Pro Gly His Gln Ala Pro  
530 535 540  
His Val His Tyr Ala Arg Leu Lys Thr Leu Arg Ser Leu Glu Ala Thr  
545 550 555 560  
Asp Ser Ala Phe Asp Asn Pro Asp Tyr Trp His Ser Arg Leu Phe Pro  
565 570 575  
Lys Ala Asn Ala Gln Gly Thr  
580

&lt;210&gt; 2506

&lt;211&gt; 247

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2506



Met Lys Arg Leu Leu Thr Thr Gly Val Ser Arg Trp Asn Thr Arg Gln  
 1 5 10 15  
 Ile Ala Leu Trp Asp Gln Glu Asp Leu Ser Met Pro Leu Ile Glu Glu  
 20 25 30  
 Glu Ile Asp Gly Leu Ser Gly Leu Leu Phe Pro Phe Tyr Asp Ala Asp  
 35 40 45  
 Thr His Met Leu Tyr Leu Ala Gly Lys Gly Asp Gly Asn Ile Arg Tyr  
 50 55 60  
 Tyr Glu Ile Ser Thr Glu Lys Pro Tyr Leu Ser Tyr Leu Met Glu Phe  
 65 70 75 80  
 Arg Ser Pro Ala Pro Gln Lys Gly Leu Gly Val Met Pro Lys His Gly  
 85 90 95  
 Leu Asp Val Ser Ala Cys Glu Val Phe Arg Phe Tyr Lys Leu Val Thr  
 100 105 110  
 Leu Lys Gly Leu Ile Glu Pro Ile Ser Met Ile Val Pro Arg Arg Ser  
 115 120 125  
 Asp Ser Tyr Gln Glu Asp Ile Tyr Pro Met Thr Pro Gly Thr Glu Pro  
 130 135 140  
 Ala Leu Thr Pro Asp Glu Trp Leu Gly Gly Ile Asn Arg Asp Pro Val  
 145 150 155 160  
 Leu Met Ser Leu Lys Glu Gly Tyr Lys Lys Ser Ser Lys Met Val Phe  
 165 170 175  
 Lys Ala Pro Ile Lys Glu Lys Lys Ser Val Val Val Asn Gly Ile Asp  
 180 185 190  
 Leu Leu Glu Asn Val Pro Pro Arg Thr Glu Asn Glu Leu Leu Arg Met  
 195 200 205  
 Phe Phe Arg Gln Gln Asp Glu Ile Arg Arg Leu Lys Glu Glu Leu Ala  
 210 215 220  
 Gln Lys Asp Ile Arg Ile Arg Gln Leu Gln Leu Glu Leu Lys Asn Leu

225                      230                      235                      240  
Arg Asn Ser Pro Lys Asn Cys  
245

<210> 2507

<211> 345

<212> PRT

<213> Homo sapiens

<400> 2507

Met Ala Pro Val Ser Trp Ile Thr Pro Gly Leu Lys Thr Thr Ala Val  
1                      5                      10                      15  
Cys Arg Gly Val Leu Arg Gly Val Thr Phe Leu Leu Arg Arg Glu Gly  
20                      25                      30  
Asp His Glu Phe Leu Glu Val Pro Glu Ala Gln Glu Asp Val Glu Ala  
35                      40                      45  
Thr Phe Pro Val His Gln Pro Gly Asn Tyr Ser Cys Ser Tyr Arg Thr  
50                      55                      60  
Asp Gly Glu Gly Ala Leu Ser Glu Pro Ser Ala Thr Val Thr Ile Glu  
65                      70                      75                      80  
Glu Leu Ala Ala Pro Pro Pro Pro Val Leu Met His His Gly Glu Ser  
85                      90                      95  
Ser Gln Val Leu His Pro Gly Asn Lys Val Thr Leu Thr Cys Val Ala  
100                      105                      110  
Pro Leu Ser Gly Val Asp Phe Gln Leu Arg Arg Gly Glu Lys Glu Leu  
115                      120                      125  
Leu Val Pro Arg Ser Ser Thr Ser Pro Asp Arg Ile Phe Phe His Leu  
130                      135                      140

|   |     |     |     |
|---|-----|-----|-----|
| Asn Ala Val Ala Leu Gly Asp Gly Gly His Tyr Thr Cys Arg Tyr Arg |     |     |     |
| 145   | 150 | 155 | 160 |
| Leu His Asp Asn Gln Asn Gly Trp Ser Gly Asp Ser Ala Pro Val Glu |     |     |     |
| 165   | 170 | 175 |     |
| Leu Ile Leu Ser Asp Glu Thr Leu Pro Ala Pro Glu Phe Ser Pro Glu |     |     |     |
| 180   | 185 | 190 |     |
| Pro Glu Ser Gly Arg Ala Leu Arg Leu Arg Cys Leu Ala Pro Leu Glu |     |     |     |
| 195   | 200 | 205 |     |
| Gly Ala Arg Phe Ala Leu Val Arg Glu Asp Arg Gly Gly Arg Arg Val |     |     |     |
| 210   | 215 | 220 |     |
| His Arg Phe Gln Ser Pro Ala Gly Thr Glu Ala Leu Phe Glu Leu His |     |     |     |
| 225   | 230 | 235 | 240 |
| Asn Ile Ser Val Ala Asp Ser Ala Asn Tyr Ser Cys Val Tyr Val Asp |     |     |     |
| 245   | 250 | 255 |     |
| Leu Lys Pro Pro Phe Gly Gly Ser Ala Pro Ser Glu Arg Leu Glu Leu |     |     |     |
| 260   | 265 | 270 |     |
| His Val Asp Gly Glu Leu Ala Gly His Gln Arg Gly Arg Ala Arg Val |     |     |     |
| 275   | 280 | 285 |     |
| Gln Cys Pro Ser Gly Pro Pro Val Phe Pro Leu Phe Pro Trp Ala Ser |     |     |     |
| 290   | 295 | 300 |     |
| Asp Gly Gly Ala Leu Gly Leu Gly Ser Ala Pro Ile Ala Tyr Pro Gly |     |     |     |
| 305   | 310 | 315 | 320 |
| Gly Glu Gln Ala Ile Gly Gly Arg Gly Ser Gly Asp Ala Trp Asn Phe |     |     |     |
| 325   | 330 | 335 |     |
| Gly Leu Phe Pro Thr Asp Ala Ser Pro                             |     |     |     |
| 340   | 345 |     |     |

&lt;210&gt; 2508

&lt;211&gt; 105

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2508

Met Arg Thr Gly Ile Phe Val Phe Leu Thr Lys Cys Cys Ile Ser Gln

1 5 10 15

Asp His Pro Gly Pro Pro Cys Pro Ile Leu Cys Leu Lys Lys Pro Trp

20 25 30

Asp Pro Ser Arg Gln Thr His Arg Arg Leu Asp Val Glu Arg Ser Thr

35 40 45

Ser Val Gln Glu His Met Gly Gly Cys His Phe Ser Pro Phe Pro Glu

50 55 60

Arg Glu Lys Leu Ser Thr Leu Arg Gly Ile His Gln Gln Ala Pro Ala

65 70 75 80

Leu Trp Gln Ala Thr Asp Gln Trp Ile Asp Ile Glu Phe Gly Trp Gly

85 90 95

Ser Gln Arg Arg Ala Trp Ala Ala Glu

100 105

&lt;210&gt; 2509

&lt;211&gt; 114

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2509

Met Arg Trp Arg Gln Arg Ser Phe Leu Leu Arg Leu Phe Leu Gly Ser

1 5 10 15

Leu Arg Gly Gly Gln His His Pro Pro Leu Thr Leu Pro Ser Ala Ser  
                     20                    25                    30  
 Ser Leu Pro Phe Ser Thr Leu Ser Leu Leu Leu Ala Ser Ser Leu Ser  
                     35                    40                    45  
 Cys Cys Leu Val Ser Pro Cys Pro Lys Thr Pro Gly Ser Phe Val Leu  
                     50                    55                    60  
 Leu Pro Trp Pro Pro Pro Arg Arg Arg Ser Gln Ala Pro Ser Pro Arg  
                     65                    70                    75                    80  
 Arg Gly Ile His Thr Thr Gly Ser Cys Trp Gly Trp Gly Ser Pro Ala  
                                     85                    90                    95  
 Gly Phe Leu Met Pro Cys Ala Gln Gly Val Ala Ala Val Ile Phe Gly  
                     100                    105                    110  
 Leu Ser

<210> 2510

<211> 243

<212> PRT

<213> Homo sapiens

<400> 2510

Met Gln Phe Arg Leu Phe Ser Phe Ala Leu Ile Ile Leu Asn Cys Met  
           1                    5                    10                    15  
 Asp Tyr Ser His Cys Gln Gly Asn Arg Trp Arg Arg Ser Lys Arg Ala  
                     20                    25                    30  
 Ser Tyr Val Ser Asn Pro Ile Cys Lys Gly Cys Leu Ser Cys Ser Lys  
                     35                    40                    45  
 Asp Asn Gly Cys Ser Arg Cys Gln Gln Lys Leu Phe Phe Phe Leu Arg

|   |     |     |
|---|-----|-----|
| 50  | 55  | 60  |
| Arg Glu Gly Met Arg Gln Tyr Gly Glu Cys Leu His Ser Cys Pro Ser |     |     |
| 65  | 70  | 75  |
| Gly Tyr Tyr Gly His Arg Ala Pro Asp Met Asn Arg Cys Ala Arg Cys |     |     |
| 85  | 90  | 95  |
| Arg Ile Glu Asn Cys Asp Ser Cys Phe Ser Lys Asp Phe Cys Thr Lys |     |     |
| 100   | 105 | 110 |
| Cys Lys Val Gly Phe Tyr Leu His Arg Gly Arg Cys Phe Asp Glu Cys |     |     |
| 115   | 120 | 125 |
| Pro Asp Gly Phe Ala Pro Leu Glu Glu Thr Met Glu Cys Val Glu Gly |     |     |
| 130   | 135 | 140 |
| Cys Glu Val Gly His Trp Ser Glu Trp Gly Thr Cys Ser Arg Asn Asn |     |     |
| 145   | 150 | 155 |
| Arg Thr Cys Gly Phe Lys Trp Gly Leu Glu Thr Arg Thr Arg Gln Ile |     |     |
| 165   | 170 | 175 |
| Val Lys Lys Pro Val Lys Asp Thr Ile Pro Cys Pro Thr Ile Ala Glu |     |     |
| 180   | 185 | 190 |
| Ser Arg Arg Cys Lys Met Thr Met Arg His Cys Pro Gly Gly Lys Arg |     |     |
| 195   | 200 | 205 |
| Thr Pro Lys Ala Lys Glu Lys Arg Asn Lys Lys Lys Lys Arg Lys Leu |     |     |
| 210   | 215 | 220 |
| Ile Glu Arg Ala Gln Glu Gln His Ser Val Phe Leu Ala Thr Asp Arg |     |     |
| 225   | 230 | 235 |
| Ala Asn Gln   |     | 240 |

&lt;210&gt; 2511

&lt;211&gt; 144

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2511

Met Cys Gly Trp Ala Ala Tyr Leu Met Arg Glu Pro Pro Pro Lys Pro  
1 5 10 15  
Glu Pro Ser Ser Leu Cys Gly Gln His Pro Gly Arg Pro Gly Gly Ala  
20 25 30  
Ala Ser Pro Ala Pro Thr Pro Ser Ala Trp Cys Trp Pro Val Ala Pro  
35 40 45  
Glu Pro Leu Thr Ser Pro Val Arg Gly Leu Gly Pro Ser Pro Gly Pro  
50 55 60  
Trp Trp Gln Leu Pro Val Ala Gln Ala Ala Cys Pro Ala Pro Arg Val  
65 70 75 80  
Glu Val Glu Leu Arg Gly Leu Leu Leu Gln Gly Ala Glu Gly Gln Arg  
85 90 95  
Pro Gly Phe Gly Tyr Gly Gly Arg Ala Ser Asp Tyr Lys Ser Ala His  
100 105 110  
Lys Gly Phe Lys Gly Val Asp Ala Gln Gly Thr Leu Ser Lys Ile Phe  
115 120 125  
Lys Leu Gly Gly Arg Asp Ser Arg Ser Gly Ser Pro Met Ala Arg Arg  
130 135 140

&lt;210&gt; 2512

&lt;211&gt; 172

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2512

Met Pro Arg Ala Ser Cys Cys His Cys Leu Cys Gly Pro Glu Ser Trp  
 1 5 10 15  
 Thr Cys Pro Ser Asp Ser Gly Val Ala Ala Trp Ala Gly Ser Val Thr  
 20 25 30  
 Leu Gly Cys Tyr Thr Phe Trp Glu Leu Asp Arg Ser Gly Cys Leu Gly  
 35 40 45  
 Gly Leu Trp His Pro Gly Met Leu Tyr Ile Leu Gly Ala Gly Gln Glu  
 50 55 60  
 Trp Leu Leu Gly Trp Ala Leu Ala Pro Trp Asp Val Ile His Ser Gly  
 65 70 75 80  
 Asn Cys Asn Gln Pro Leu Glu Lys Ser Glu Leu Gln Glu Val Thr Leu  
 85 90 95  
 Gly Trp Asp Leu Gly Thr Trp Pro Gly Gln His Gly Asp Thr Arg Leu  
 100 105 110  
 Gln Gln Glu Leu Trp Ser Val Leu Gly Ser Leu Gly Ala Gly Leu Arg  
 115 120 125  
 Pro Trp Ala Gly Phe Leu Gln Ala Glu Val Leu Gly Lys Trp Gly Ser  
 130 135 140  
 Gln Ala Ser Cys Arg Leu Pro His Tyr Val Ala Ser Asp Ser Ser Ser  
 145 150 155 160  
 Leu Met Lys Ala Ile Trp Phe Ile Thr Leu Lys Leu  
 165 170

&lt;210&gt; 2513

&lt;211&gt; 678

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens



&lt;400&gt; 2513

Met Val Arg Ala Gly Gly Arg Ala Trp Gln Gln Gly Leu His Ser Leu  
 1 5 10 15  
 Ser Ala Val Ser Ile Leu Ala Lys Gly Phe Met Phe Leu Leu Val Gly  
 20 25 30  
 Asp Ser Arg Ala Glu Ser Val Thr Asn Thr Leu Val Leu Phe Thr Ile  
 35 40 45  
 Gly Glu Glu Ser Leu Thr Ile Phe Val Asp Lys Gln Lys Leu Gly Arg  
 50 55 60  
 Lys Thr Glu Thr Thr Gly Gly Ala Ser Ile Ile Gly Gly Ser Gly Asn  
 65 70 75 80  
 Ser Thr Ala Val Ser Leu Glu Thr Leu His Gln Leu Ala Ala Ser Tyr  
 85 90 95  
 Phe Ile Asp Arg Glu Ser Thr Leu Arg Arg Leu His His Ile Gln Ile  
 100 105 110  
 Ala Thr Gly Ala Ile Lys Val Thr Glu Thr Arg Thr Gly Pro Leu Gly  
 115 120 125  
 Cys Ser Asn Tyr Asp Asn Leu Asp Ser Val Ser Ser Val Leu Val Gln  
 130 135 140  
 Ser Pro Glu Asn Lys Val Gln Leu Leu Gly Leu Gln Val Leu Leu Pro  
 145 150 155 160  
 Glu Tyr Leu Arg Glu Arg Phe Val Ala Ala Ala Leu Ser Tyr Ile Thr  
 165 170 175  
 Cys Ser Ser Glu Gly Glu Leu Val Cys Lys Glu Asn Asp Cys Trp Cys  
 180 185 190  
 Lys Cys Ser Pro Thr Phe Pro Glu Cys Asn Cys Pro Asp Ala Asp Ile  
 195 200 205  
 Gln Ala Met Glu Asp Ser Leu Leu Gln Ile Gln Asp Ser Trp Ala Thr

|   |     |     |
|---|-----|-----|
| 210   | 215 | 220 |
| His Asn Arg Gln Phe Glu Glu Ser Glu Glu Phe Gln Ala Leu Leu Lys |     |     |
| 225   | 230 | 235 |
| Arg Leu Pro Asp Asp Arg Phe Leu Asn Ser Thr Ala Ile Ser Gln Phe |     |     |
| 245   | 250 | 255 |
| Trp Ala Met Asp Thr Ser Leu Gln His Arg Tyr Gln Gln Leu Gly Ala |     |     |
| 260   | 265 | 270 |
| Gly Leu Lys Val Leu Phe Lys Lys Thr His Arg Ile Leu Arg Arg Leu |     |     |
| 275   | 280 | 285 |
| Phe Asn Leu Cys Lys Arg Cys His Arg Gln Pro Arg Phe Arg Leu Pro |     |     |
| 290   | 295 | 300 |
| Lys Glu Arg Ser Leu Ser Tyr Trp Trp Asn Arg Ile Gln Ser Leu Leu |     |     |
| 305   | 310 | 315 |
| Tyr Cys Gly Glu Ser Thr Phe Pro Gly Thr Phe Leu Glu Gln Ser His |     |     |
| 325   | 330 | 335 |
| Ser Cys Thr Cys Pro Tyr Asp Gln Ser Ser Cys Gln Gly Pro Ile Pro |     |     |
| 340   | 345 | 350 |
| Cys Ala Leu Gly Glu Gly Pro Ala Cys Ala His Cys Ala Pro Asp Asn |     |     |
| 355   | 360 | 365 |
| Ser Thr Arg Cys Gly Ser Cys Asn Pro Gly Tyr Val Leu Ala Gln Gly |     |     |
| 370   | 375 | 380 |
| Leu Cys Arg Pro Glu Val Ala Glu Ser Leu Glu Asn Phe Leu Gly Leu |     |     |
| 385   | 390 | 395 |
| Glu Thr Asp Leu Gln Asp Leu Glu Leu Lys Tyr Leu Leu Gln Lys Gln |     |     |
| 405   | 410 | 415 |
| Asp Ser Arg Ile Glu Val His Ser Ile Phe Ile Ser Asn Asp Met Arg |     |     |
| 420   | 425 | 430 |
| Leu Gly Ser Trp Phe Asp Pro Ser Trp Arg Lys Arg Met Leu Leu Thr |     |     |
| 435   | 440 | 445 |

Leu Lys Ser Asn Lys Tyr Lys Pro Gly Leu Val His Val Met Leu Ala  
450 455 460

Leu Ser Leu Gln Ile Cys Leu Thr Lys Asn Ser Thr Leu Glu Pro Val  
465 470 475 480

Met Ala Ile Tyr Val Asn Pro Phe Gly Gly Ser His Ser Glu Ser Trp  
485 490 495

Phe Met Pro Val Asn Glu Gly Ser Phe Pro Asp Trp Glu Arg Thr Asn  
500 505 510

Val Asp Ala Ala Ala Gln Cys Gln Asn Trp Thr Ile Thr Leu Gly Asn  
515 520 525

Arg Trp Lys Thr Phe Phe Glu Thr Val His Val Tyr Leu Arg Ser Arg  
530 535 540

Ile Lys Ser Leu Asp Asp Ser Ser Asn Glu Thr Ile Tyr Tyr Glu Pro  
545 550 555 560

Leu Glu Met Thr Asp Pro Ser Lys Asn Leu Gly Tyr Met Lys Ile Asn  
565 570 575

Thr Leu Gln Val Phe Gly Tyr Ser Leu Pro Phe Asp Pro Asp Ala Ile  
580 585 590

Arg Asp Leu Ile Leu Gln Leu Asp Tyr Pro Tyr Thr Gln Gly Ser Gln  
595 600 605

Asp Ser Ala Leu Leu Gln Leu Ile Glu Leu Arg Asp Arg Val Asn Gln  
610 615 620

Leu Ser Pro Pro Gly Lys Val Arg Leu Asp Leu Phe Ser Cys Leu Leu  
625 630 635 640

Arg His Arg Leu Lys Leu Ala Asn Asn Glu Val Gly Arg Ile Gln Ser  
645 650 655

Ser Leu Arg Ala Phe Asn Ser Lys Leu Pro Asn Pro Val Glu Tyr Glu  
660 665 670

Thr Gly Lys Leu Cys Ser

675

&lt;210&gt; 2514

&lt;211&gt; 121

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2514

Met Leu Arg Asn Pro Gly Ser Gln Gly Pro Ala Ala Ala Gly Arg Gly  
 1 5 10 15  
 Ala Val Gln Glu Ala Gly Leu Gly Met Ser Thr Gly Leu Arg Leu Ala  
 20 25 30  
 Glu Ser Arg Val Glu Pro Ala Leu Glu Lys Gln Ala Gln Leu Glu Glu  
 35 40 45  
 Gln Leu Arg Asp Lys Val Leu His Glu Lys Asp Leu Ser Gln Gln Gln  
 50 55 60  
 Met Gln Ser Asp Leu Asp Lys Ala Asp Leu Ser Ala Arg Arg Val Pro  
 65 70 75 80  
 Gly Gly Cys Cys Met Arg Gln Ala Ser Leu Gln Lys Ser Asp Arg Ala  
 85 90 95  
 Gly Pro Gly Ser Glu Ala Ser Thr Glu Ala Glu Ser Gly Glu Gly Ser  
 100 105 110  
 Gly Arg Gln Gly Pro His Arg Glu Ala  
 115 120

&lt;210&gt; 2515

&lt;211&gt; 766

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2515

|     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| Met | Ile | Trp | Arg | Ser | Arg | Ala | Gly | Ala | Glu | Leu | Phe | Ser | Leu | Met | Ala |
| 1   |     |     |     | 5   |     |     |     |     | 10  |     |     |     |     | 15  |     |
| Leu | Trp | Glu | Trp | Ile | Ala | Leu | Ser | Leu | His | Cys | Trp | Val | Leu | Ala | Val |
|     |     |     |     | 20  |     |     |     |     | 25  |     |     |     |     | 30  |     |
| Ala | Ala | Val | Ser | Asp | Gln | His | Ala | Thr | Ser | Pro | Phe | Asp | Trp | Leu | Leu |
|     |     |     | 35  |     |     |     |     | 40  |     |     |     |     | 45  |     |     |
| Ser | Asp | Lys | Gly | Pro | Phe | His | Arg | Ser | Gln | Glu | Tyr | Thr | Asp | Phe | Val |
|     |     | 50  |     |     |     |     | 55  |     |     |     | 60  |     |     |     |     |
| Asp | Arg | Ser | Arg | Gln | Gly | Phe | Ser | Thr | Arg | Tyr | Lys | Ile | Tyr | Arg | Glu |
|     |     |     |     | 65  |     |     | 70  |     |     |     | 75  |     |     |     | 80  |
| Phe | Gly | Arg | Trp | Lys | Val | Asn | Asn | Leu | Ala | Val | Glu | Arg | Arg | Asn | Phe |
|     |     |     |     | 85  |     |     |     |     | 90  |     |     |     |     |     | 95  |
| Leu | Gly | Ser | Pro | Leu | Pro | Leu | Ala | Pro | Glu | Phe | Phe | Arg | Asn | Ile | Arg |
|     |     |     | 100 |     |     |     |     |     | 105 |     |     |     |     | 110 |     |
| Leu | Leu | Gly | Arg | Arg | Pro | Thr | Leu | Gln | Gln | Ile | Thr | Glu | Asn | Leu | Ile |
|     |     |     | 115 |     |     |     |     |     | 120 |     |     |     |     | 125 |     |
| Lys | Lys | Tyr | Gly | Thr | His | Phe | Leu | Leu | Ser | Ala | Thr | Leu | Gly | Gly | Glu |
|     |     |     | 130 |     |     |     | 135 |     |     |     |     | 140 |     |     |     |
| Glu | Ser | Leu | Thr | Ile | Phe | Val | Asp | Lys | Arg | Lys | Leu | Ser | Lys | Arg | Ala |
|     |     |     | 145 |     |     |     | 150 |     |     |     | 155 |     |     |     | 160 |
| Glu | Gly | Ser | Asp | Ser | Thr | Thr | Asn | Ser | Ser | Ser | Val | Thr | Leu | Glu | Thr |
|     |     |     |     | 165 |     |     |     |     | 170 |     |     |     |     | 175 |     |
| Leu | His | Gln | Leu | Ala | Ala | Ser | Tyr | Phe | Ile | Asp | Arg | Asp | Ser | Thr | Leu |
|     |     |     |     | 180 |     |     |     |     | 185 |     |     |     |     | 190 |     |
| Arg | Arg | Leu | His | His | Ile | Gln | Ile | Ala | Ser | Thr | Ala | Ile | Lys | Val | Thr |

|   |     |     |
|---|-----|-----|
| 195   | 200 | 205 |
| Glu Thr Arg Thr Gly Pro Leu Gly Cys Ser Asn Tyr Asp Asn Leu Asp |     |     |
| 210   | 215 | 220 |
| Ser Val Ser Ser Val Leu Val Gln Ser Pro Glu Asn Lys Ile Gln Leu |     |     |
| 225   | 230 | 235 |
| Gln Gly Leu Gln Val Leu Leu Pro Asp Tyr Leu Gln Glu Arg Phe Val |     |     |
| 245   | 250 | 255 |
| Gln Ala Ala Leu Ser Tyr Ile Ala Cys Asn Ser Glu Gly Glu Phe Ile |     |     |
| 260   | 265 | 270 |
| Cys Lys Glu Asn Asp Cys Trp Cys His Cys Gly Pro Lys Phe Pro Glu |     |     |
| 275   | 280 | 285 |
| Cys Asn Cys Pro Ser Met Asp Ile Gln Ala Met Glu Glu Asn Leu Leu |     |     |
| 290   | 295 | 300 |
| Arg Ile Thr Glu Thr Trp Lys Ala Tyr Asn Ser Asp Phe Glu Glu Ser |     |     |
| 305   | 310 | 315 |
| Asp Glu Phe Lys Leu Phe Met Lys Arg Leu Pro Met Asn Tyr Phe Leu |     |     |
| 325   | 330 | 335 |
| Asn Thr Ser Thr Ile Met His Leu Trp Thr Met Asp Ser Asn Phe Gln |     |     |
| 340   | 345 | 350 |
| Arg Arg Tyr Glu Gln Leu Glu Asn Ser Met Lys Gln Leu Phe Leu Lys |     |     |
| 355   | 360 | 365 |
| Ala Gln Lys Ile Val His Lys Leu Phe Ser Leu Ser Lys Arg Cys His |     |     |
| 370   | 375 | 380 |
| Lys Gln Pro Leu Ile Ser Leu Pro Arg Gln Arg Thr Ser Thr Tyr Trp |     |     |
| 385   | 390 | 395 |
| Leu Thr Arg Ile Gln Ser Phe Leu Tyr Cys Asn Glu Asn Gly Leu Leu |     |     |
| 405   | 410 | 415 |
| Gly Ser Phe Ser Glu Glu Thr His Ser Cys Thr Cys Pro Asn Asp Gln |     |     |
| 420   | 425 | 430 |

Val Val Cys Thr Ala Phe Leu Pro Cys Thr Val Gly Asp Ala Ser Ala  
 435 440 445  
 Cys Leu Thr Cys Ala Pro Asp Asn Arg Thr Arg Cys Gly Thr Cys Asn  
 450 455 460  
 Thr Gly Tyr Met Leu Ser Gln Gly Leu Cys Lys Pro Glu Val Ala Glu  
 465 470 475 480  
 Ser Thr Asp His Tyr Ile Gly Phe Glu Thr Asp Leu Gln Asp Leu Glu  
 485 490 495  
 Met Lys Tyr Leu Leu Gln Lys Thr Asp Arg Arg Ile Glu Val His Ala  
 500 505 510  
 Ile Phe Ile Ser Asn Asp Met Arg Leu Asn Ser Trp Phe Asp Pro Ser  
 515 520 525  
 Trp Arg Lys Arg Met Leu Leu Thr Leu Lys Ser Asn Lys Tyr Lys Ser  
 530 535 540  
 Ser Leu Val His Met Ile Leu Gly Leu Ser Leu Gln Ile Cys Leu Thr  
 545 550 555 560  
 Lys Asn Ser Thr Leu Glu Pro Val Leu Ala Val Tyr Val Asn Pro Phe  
 565 570 575  
 Gly Gly Ser His Ser Glu Ser Trp Phe Met Pro Val Asn Glu Asn Ser  
 580 585 590  
 Phe Pro Asp Trp Glu Arg Thr Lys Leu Asp Leu Pro Leu Gln Cys Tyr  
 595 600 605  
 Asn Trp Thr Leu Thr Leu Gly Asn Lys Trp Lys Thr Phe Phe Glu Thr  
 610 615 620  
 Val His Ile Tyr Leu Arg Ser Arg Ile Lys Ser Asn Gly Pro Asn Gly  
 625 630 635 640  
 Asn Glu Ser Ile Tyr Tyr Glu Pro Leu Glu Phe Ile Asp Pro Ser Arg  
 645 650 655  
 Asn Leu Gly Tyr Met Lys Ile Asn Asn Ile Gln Val Phe Gly Tyr Ser

|   |     |     |     |
|---|-----|-----|-----|
| 660   | 665 | 670 |     |
| Met His Phe Asp Pro Glu Ala Ile Arg Asp Leu Ile Leu Gln Leu Asp |     |     |     |
| 675   | 680 | 685 |     |
| Tyr Pro Tyr Thr Gln Gly Ser Gln Asp Ser Ala Leu Leu Gln Leu Leu |     |     |     |
| 690   | 695 | 700 |     |
| Glu Ile Arg Asp Arg Val Asn Lys Leu Ser Pro Pro Gly Gln Arg Arg |     |     |     |
| 705   | 710 | 715 | 720 |
| Leu Asp Leu Phe Ser Cys Leu Leu Arg His Arg Leu Lys Leu Ser Thr |     |     |     |
| 725   | 730 | 735 |     |
| Ser Glu Val Val Arg Ile Gln Ser Ala Leu Gln Ala Phe Asn Ala Lys |     |     |     |
| 740   | 745 | 750 |     |
| Leu Pro Asn Thr Met Asp Tyr Asp Thr Thr Lys Leu Cys Ser         |     |     |     |
| 755   | 760 | 765 |     |

&lt;210&gt; 2516

&lt;211&gt; 174

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2516

|   |    |    |    |
|---|----|----|----|
| Met Ala Gly Ser Val Glu Leu Gln Glu Ile Gly Gly Pro Leu Pro Gly |    |    |    |
| 1   | 5  | 10 | 15 |
| Pro Ser Thr His Gln Glu Pro Leu Arg Gly Leu Pro Val Gly Leu Cys |    |    |    |
| 20  | 25 | 30 |    |
| Pro Cys Leu Pro Leu Trp Met Glu Lys Ala His Ile Val Pro Pro Val |    |    |    |
| 35  | 40 | 45 |    |
| Gly Ala Asn Cys Arg Ala Gln Gln Gly Cys Met Gly Pro Ala Ser Met |    |    |    |
| 50  | 55 | 60 |    |



Pro Leu Leu Leu Thr His Ile Leu Ser Ala Pro Thr Pro Val His Pro  
 65 70 75 80  
 Leu Val Ser Leu Ser Tyr Leu Ser Leu Ser Cys Pro His Pro Ser Leu  
 85 90 95  
 Phe Leu Ser Val Leu Leu Leu Pro Phe Thr Leu Phe Val Ser Pro Ser  
 100 105 110  
 Leu Ser Val Leu Pro Pro Ser Leu Ser Thr Leu His Leu Ser Leu Cys  
 115 120 125  
 Val Ser Ile Ser Val Ser Leu Ser Val Ser Leu Pro Ile Pro His Pro  
 130 135 140  
 His Ser Leu Ser Ser Pro Ser Ser Leu Pro Ser Cys Leu Pro Leu Ile  
 145 150 155 160  
 Trp Phe Ile Leu Leu His Pro Ala Ala Pro Pro Thr Glu Pro  
 165 170

&lt;210&gt; 2517

&lt;211&gt; 484

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2517

Met Val His Glu Thr Ser Tyr Ser Ala Gln Phe Lys Gly Glu Ala Ser  
 1 5 10 15  
 Lys Pro Thr Thr Ala Asp Asn Lys Val Ile Asp Arg Arg Arg Ile Arg  
 20 25 30  
 Ser Leu Tyr Ser Glu Pro Phe Lys Glu Pro Pro Lys Val Glu Lys Pro  
 35 40 45  
 Ser Val Gln Ser Ser Lys Pro Lys Lys Thr Ser Ala Ser His Lys Pro

|   |     |     |
|---|-----|-----|
| 50  | 55  | 60  |
| Thr Arg Lys Ala Lys Asp Lys Gln Ala Val Ser Gly Gln Ala Ala Lys |     |     |
| 65  | 70  | 75  |
| Lys Lys Ser Ala Glu Gly Pro Ser Thr Thr Lys Pro Asp Asp Lys Glu |     |     |
| 85  | 90  | 95  |
| Gln Ser Lys Glu Met Asn Asn Lys Leu Ala Glu Ala Lys Glu Ser Leu |     |     |
| 100   | 105 | 110 |
| Ala Gln Pro Val Ser Asp Ser Ser Lys Thr Gln Gly Pro Val Ala Thr |     |     |
| 115   | 120 | 125 |
| Glu Pro Asp Lys Asp Gln Gly Ser Val Val Pro Gly Leu Leu Lys Gly |     |     |
| 130   | 135 | 140 |
| Gln Gly Pro Met Val Gln Glu Pro Leu Lys Lys Gln Gly Ser Val Val |     |     |
| 145   | 150 | 155 |
| Pro Gly Pro Pro Lys Asp Leu Gly Pro Met Ile Pro Leu Pro Val Lys |     |     |
| 165   | 170 | 175 |
| Asp Gln Asp His Thr Val Pro Glu Pro Leu Lys Asn Glu Ser Pro Val |     |     |
| 180   | 185 | 190 |
| Ile Ser Ala Pro Val Lys Asp Gln Gly Pro Ser Val Pro Val Pro Pro |     |     |
| 195   | 200 | 205 |
| Lys Asn Gln Ser Pro Met Val Pro Ala Lys Val Lys Asp Gln Gly Ser |     |     |
| 210   | 215 | 220 |
| Val Val Pro Glu Ser Leu Lys Asp Gln Gly Pro Arg Ile Pro Glu Pro |     |     |
| 225   | 230 | 235 |
| Val Lys Asn Gln Ala Pro Met Val Pro Ala Pro Val Lys Asp Glu Gly |     |     |
| 245   | 250 | 255 |
| Pro Met Val Ser Ala Ser Val Lys Asp Gln Gly Pro Met Val Ser Ala |     |     |
| 260   | 265 | 270 |
| Pro Val Lys Asp Gln Gly Pro Ile Val Pro Ala Pro Val Lys Gly Glu |     |     |
| 275   | 280 | 285 |

Gly Pro Ile Val Pro Ala Pro Val Lys Asp Glu Gly Pro Met Val Ser  
 290 295 300  
 Ala Pro Ile Lys Asp Gln Asp Pro Met Val Pro Glu His Pro Lys Asp  
 305 310 315 320  
 Glu Ser Ala Met Ala Thr Ala Pro Ile Lys Asn Gln Gly Ser Met Val  
 325 330 335  
 Ser Glu Pro Val Lys Asn Gln Gly Leu Val Val Ser Gly Pro Val Lys  
 340 345 350  
 Asp Gln Asp Val Val Val Pro Glu His Ala Lys Val His Asp Ser Ala  
 355 360 365  
 Val Val Ala Pro Val Lys Asn Gln Gly Pro Val Val Pro Glu Ser Val  
 370 375 380  
 Lys Asn Gln Asp Pro Ile Leu Pro Val Leu Val Lys Asp Gln Gly Pro  
 385 390 395 400  
 Thr Val Leu Gln Pro Pro Lys Asn Gln Gly Arg Ile Val Pro Glu Pro  
 405 410 415  
 Leu Lys Asn Gln Val Pro Ile Val Pro Val Pro Leu Lys Asp Gln Asp  
 420 425 430  
 Pro Leu Val Pro Val Pro Ala Lys Asp Gln Gly Pro Ala Val Pro Glu  
 435 440 445  
 Pro Leu Lys Thr Gln Gly Pro Arg Asp Pro Gln Leu Pro Thr Val Ser  
 450 455 460  
 Pro Leu Pro Arg Val Met Ile Pro Thr Ala Pro His Thr Glu Tyr Ile  
 465 470 475 480  
 Glu Ser Ser Pro

&lt;210&gt; 2518

&lt;211&gt; 367

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2518

Met Lys Arg Glu Arg Gly Ala Leu Ser Arg Ala Ser Arg Ala Leu Arg

1 5 10 15

Leu Ala Pro Phe Val Tyr Leu Leu Leu Ile Gln Thr Asp Pro Leu Glu

20 25 30

Gly Val Asn Ile Thr Ser Pro Val Arg Leu Ile His Gly Thr Val Gly

35 40 45

Lys Ser Ala Leu Leu Ser Val Gln Tyr Ser Ser Thr Ser Ser Asp Arg

50 55 60

Pro Val Val Lys Trp Gln Leu Lys Arg Asp Lys Pro Val Thr Val Val

65 70 75 80

Gln Ser Ile Gly Thr Glu Val Ile Gly Thr Leu Arg Pro Asp Ser Arg

85 90 95

Asp Arg Ile Arg Leu Phe Glu Asn Gly Ser Leu Leu Leu Ser Asp Leu

100 105 110

Gln Leu Ala Asp Glu Gly Thr Tyr Glu Val Glu Ile Ser Ile Thr Asp

115 120 125

Asp Thr Phe Thr Gly Glu Lys Thr Ile Asn Leu Thr Val Asp Val Pro

130 135 140

Ile Ser Arg Pro Gln Val Leu Val Ala Ser Thr Thr Val Leu Glu Leu

145 150 155 160

Ser Glu Ala Phe Thr Leu Asn Cys Ser His Glu Asn Gly Thr Lys Pro

165 170 175

Ser Tyr Thr Trp Leu Lys Asp Gly Lys Pro Leu Leu Asn Asp Ser Arg

180 185 190

Met Leu Leu Ser Pro Asp Gln Lys Val Leu Thr Ile Thr Arg Val Leu  
195 200 205  
Met Glu Asp Asp Asp Leu Tyr Ser Cys Val Val Glu Asn Pro Ile Ser  
210 215 220  
Gln Gly Arg Ser Leu Pro Val Lys Ile Thr Val Tyr Arg Arg Ser Ser  
225 230 235 240  
Leu Tyr Ile Ile Leu Ser Thr Gly Gly Ile Phe Leu Leu Val Thr Leu  
245 250 255  
Val Thr Val Cys Ala Cys Trp Lys Pro Ser Lys Arg Lys Gln Lys Lys  
260 265 270  
Leu Glu Lys Gln Asn Ser Leu Glu Tyr Met Asp Gln Asn Asp Asp Arg  
275 280 285  
Leu Lys Pro Glu Gly Glu Leu Pro Ala Thr Gln Ser Pro Ile Pro Ser  
290 295 300  
Thr Ile Arg Ser Val Gly Cys Trp Glu Lys Ala Glu Leu Gly Asp Lys  
305 310 315 320  
Glu Asn Ser Ser Ala Gly Thr Leu Pro Ser Asp Leu Gly Ala Ser Lys  
325 330 335  
Gly Lys Glu Pro Glu Pro Ala Ser Leu Ala Ser Ser His Ser Leu Pro  
340 345 350  
Arg Arg His Ala Met Pro Ser Thr Leu Ser Val Ser Val His Glu  
355 360 365

&lt;210&gt; 2519

&lt;211&gt; 626

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2519

|     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| Met | Ser | Lys | Lys | Gly | Arg | Ser | Lys | Gly | Glu | Lys | Pro | Glu | Met | Glu | Thr |
| 1   |     |     |     | 5   |     |     |     |     | 10  |     |     |     |     | 15  |     |
| Asp | Ala | Val | Gln | Met | Ala | Asn | Glu | Glu | Leu | Arg | Ala | Lys | Leu | Thr | Ser |
|     |     |     | 20  |     |     |     |     | 25  |     |     |     |     | 30  |     |     |
| Ile | Gln | Ile | Glu | Phe | Gln | Gln | Glu | Lys | Ser | Lys | Val | Gly | Lys | Leu | Arg |
|     |     |     | 35  |     |     |     |     | 40  |     |     |     |     | 45  |     |     |
| Glu | Arg | Leu | Gln | Glu | Ala | Lys | Leu | Glu | Arg | Glu | Gln | Glu | Gln | Arg | Arg |
|     |     |     | 50  |     |     |     | 55  |     |     |     |     |     | 60  |     |     |
| His | Thr | Ala | Tyr | Ile | Ser | Glu | Leu | Lys | Ala | Lys | Leu | His | Glu | Glu | Lys |
|     |     |     | 65  |     |     |     | 70  |     |     |     |     | 75  |     |     | 80  |
| Thr | Lys | Glu | Leu | Gln | Ala | Leu | Arg | Glu | Gly | Leu | Ile | Arg | Gln | His | Glu |
|     |     |     |     | 85  |     |     |     |     | 90  |     |     |     |     | 95  |     |
| Gln | Glu | Ala | Ala | Arg | Thr | Ala | Lys | Ile | Lys | Glu | Gly | Glu | Leu | Gln | Arg |
|     |     |     | 100 |     |     |     |     | 105 |     |     |     |     |     | 110 |     |
| Leu | Gln | Ala | Thr | Leu | Asn | Val | Leu | Arg | Asp | Gly | Ala | Ala | Asp | Lys | Val |
|     |     |     | 115 |     |     |     |     | 120 |     |     |     |     |     | 125 |     |
| Lys | Thr | Ala | Leu | Leu | Thr | Glu | Ala | Arg | Glu | Glu | Ala | Arg | Arg | Ala | Phe |
|     |     |     | 130 |     |     |     |     | 135 |     |     |     |     |     | 140 |     |
| Asp | Gly | Glu | Arg | Leu | Arg | Leu | Gln | Gln | Glu | Ile | Leu | Glu | Leu | Lys | Ala |
|     |     |     | 145 |     |     |     |     | 150 |     |     |     |     |     | 155 | 160 |
| Ala | Arg | Lys | Gln | Ala | Glu | Glu | Ala | Leu | Ser | Asn | Cys | Met | Gln | Ala | Asp |
|     |     |     |     | 165 |     |     |     |     |     | 170 |     |     |     | 175 |     |
| Lys | Thr | Lys | Ala | Ala | Asp | Leu | Arg | Ala | Ala | Tyr | Gln | Ala | His | Gln | Asp |
|     |     |     | 180 |     |     |     |     |     |     | 185 |     |     |     | 190 |     |
| Glu | Val | His | Arg | Ile | Lys | Arg | Glu | Cys | Glu | Arg | Asp | Ile | Arg | Arg | Leu |
|     |     |     | 195 |     |     |     |     |     | 200 |     |     |     |     | 205 |     |
| Met | Asp | Glu | Ile | Lys | Gly | Lys | Asp | Arg | Val | Ile | Leu | Ala | Ser | Glu | Lys |
|     |     |     | 210 |     |     |     |     | 215 |     |     |     |     |     | 220 |     |

Glu Leu Gly Val Gln Ala Gly Gln Thr Gln Lys Leu Leu Leu Gln Lys  
225 230 235 240  
Glu Ala Leu Asp Glu Gln Leu Val Gln Val Lys Glu Ala Glu Arg His  
245 250 255  
His Ser Ser Pro Lys Arg Glu Leu Pro Pro Gly Ile Gly Asp Met Val  
260 265 270  
Glu Leu Met Gly Val Gln Asp Gln His Met Asp Glu Arg Asp Val Arg  
275 280 285  
Arg Phe Gln Leu Lys Ile Ala Glu Leu Asn Ser Val Ile Arg Lys Leu  
290 295 300  
Glu Asp Arg Asn Thr Leu Leu Ala Asp Glu Arg Asn Glu Leu Leu Lys  
305 310 315 320  
Arg Ser Arg Glu Thr Glu Val Gln Leu Lys Pro Leu Val Glu Lys Asn  
325 330 335  
Lys Arg Met Asn Lys Lys Asn Glu Asp Leu Leu Gln Ser Ile Gln Arg  
340 345 350  
Met Glu Glu Lys Ile Lys Asn Leu Thr Arg Glu Asn Ala Glu Met Lys  
355 360 365  
Glu Lys Leu Ser Ala Gln Ala Ser Leu Lys Arg His Thr Ser Leu Asn  
370 375 380  
Asp Leu Ser Leu Thr Arg Asp Glu Gln Glu Ile Glu Phe Leu Arg Leu  
385 390 395 400  
Gln Val Leu Glu Gln Gln His Val Ile Asp Asp Leu Ser Leu Glu Arg  
405 410 415  
Glu Arg Leu Leu Arg Ser Lys Arg His Arg Gly Lys Ser Leu Lys Pro  
420 425 430  
Pro Lys Lys His Val Val Glu Thr Phe Phe Gly Phe Asp Glu Glu Ser  
435 440 445  
Val Asp Ser Glu Thr Leu Ser Glu Thr Ser Tyr Asn Thr Asp Arg Thr

450                      455                      460  
 Asp Arg Thr Pro Ala Thr Pro Glu Glu Asp Leu Asp Asp Ala Thr Ala  
 465                      470                      475                      480  
 Arg Glu Glu Ala Asp Leu Arg Phe Cys Gln Leu Thr Arg Glu Tyr Gln  
                     485                      490                      495  
 Ala Leu Gln Arg Ala Tyr Ala Leu Leu Gln Glu Gln Val Gly Gly Thr  
                     500                      505                      510  
 Leu Asp Ala Glu Arg Glu Ala Arg Thr Arg Glu Gln Leu Gln Ala Asp  
                     515                      520                      525  
 Leu Leu Arg Cys Gln Ala Lys Ile Glu Asp Leu Glu Lys Leu Leu Val  
                     530                      535                      540  
 Glu Lys Gly Gln Asp Ser Lys Trp Val Glu Glu Lys Gln Leu Leu Ile  
 545                      550                      555                      560  
 Arg Thr Asn Gln Asp Leu Leu Glu Lys Ile Tyr Arg Leu Glu Met Glu  
                     565                      570                      575  
 Glu Asn Gln Leu Lys Asn Glu Met Gln Asp Ala Lys Asp Gln Asn Glu  
                     580                      585                      590  
 Leu Leu Glu Phe Arg Val Leu Glu Leu Glu Val Arg Asp Ser Ile Cys  
                     595                      600                      605  
 Cys Lys Leu Ser Asn Gly Ala Asp Ile Leu Phe Glu Pro Lys Leu Lys  
                     610                      615                      620  
 Phe Met  
 625

&lt;210&gt; 2520

&lt;211&gt; 169

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens



&lt;400&gt; 2520

Met Gly Leu Val Leu Pro Trp Ser Ala Asp Asp Asp Ser Pro Ser Arg  
 1 5 10 15  
 Ala Thr Leu Gly Asn Met Lys Gln Val Trp Arg Val Gly Cys Val Pro  
 20 25 30  
 Ala Leu Val Gly Pro Val Gly Leu Glu His Ala Phe Arg Gly Ser Val  
 35 40 45  
 Trp Ala Glu Ala Arg Pro Thr Thr Gln Cys Gln Ser Gln Arg Arg Gly  
 50 55 60  
 Pro Thr Thr Lys Ala Lys Leu Asp Gln Val Ser Ile Ala Met Ala Gln  
 65 70 75 80  
 Cys Ala Pro Trp Pro Leu Lys Ile Pro Leu Cys Arg Val Cys Arg Asp  
 85 90 95  
 Leu Asp Cys Lys Gly Pro Ser Leu Gln Val Trp Lys His Leu Pro Ile  
 100 105 110  
 Arg Ala Leu Ser Pro Ser Gly Ser Gly Leu Gln Gly Ala Ala Gly Phe  
 115 120 125  
 Thr Ala Leu Gln Leu Gly Ser Gln Leu Ser Pro Arg Val Leu Val Glu  
 130 135 140  
 Pro Ser Arg Gly Gly Trp Arg Val Gly Phe Lys Gly Asp Gly Asn Thr  
 145 150 155 160  
 Trp Gly Arg Ser Trp Asn Leu Val Ala  
 165

&lt;210&gt; 2521

&lt;211&gt; 278

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2521

Met Ala Met Ser Leu Leu Gln Asp Trp Cys Arg Ser Leu Asp Val Asp  
1 5 10 15  
Ala His Arg Ala Leu Leu Val Thr Gly Ile Pro Glu Gly Leu Glu Gln  
20 25 30  
Ala Asp Val Glu Ala Val Leu Gln Pro Thr Leu Leu Pro Leu Gly Thr  
35 40 45  
Phe Arg Leu Arg His Met Lys Ala Leu Met Asn Glu Lys Ala Gln Ala  
50 55 60  
Ala Leu Val Glu Phe Val Glu Asp Val Asn His Ala Ala Ile Pro Arg  
65 70 75 80  
Glu Ile Pro Gly Lys Asp Gly Val Trp Arg Val Leu Trp Lys Asp Arg  
85 90 95  
Ala Gln Asp Thr Arg Val Leu Arg Gln Met Arg Arg Leu Leu Leu Asp  
100 105 110  
Asp Gly Pro Thr Gln Ala Ala Glu Ala Gly Thr Pro Gly Glu Ala Pro  
115 120 125  
Thr Pro Pro Ala Ser Glu Thr Gln Ala Gln Asp Ser Gly Glu Val Thr  
130 135 140  
Gly Gln Ala Gly Ser Leu Leu Gly Ala Ala Arg Asn Pro Arg Arg Gly  
145 150 155 160  
Arg Arg Gly Arg Arg Asn Arg Thr Arg Arg Asn Arg Leu Thr Gln Lys  
165 170 175  
Gly Lys Lys Arg Ser Arg Gly Gly Arg Pro Ser Ala Pro Ala Arg Ser  
180 185 190  
Glu Ala Glu Asp Ser Ser Asp Glu Ser Leu Gly Ile Val Ile Glu Glu  
195 200 205

Ile Asp Gln Gly Asp Leu Ser Gly Glu Glu Asp Gln Ser Ala Leu Tyr  
 210 215 220  
 Ala Thr Leu Gln Ala Ala Ala Arg Glu Leu Val Arg Gln Trp Ala Pro  
 225 230 235 240  
 Cys Asn Ser Glu Gly Ala Cys Pro Thr Cys Pro Trp Glu Gly Ile Gly  
 245 250 255  
 Gly Phe Gly Cys Asp Leu Thr Val Gln Thr Arg Leu Ser Gln Ser Tyr  
 260 265 270  
 Val Arg Asp Thr Gln Met  
 275

<210> 2522

<211> 518

<212> PRT

<213> Homo sapiens

<400> 2522

Met Val Gln Leu Val Leu Gln Tyr Arg Asp Tyr Gln Arg Ala Thr Gln  
 1 5 10 15  
 Arg Leu Ala Gly Ile Pro Glu Leu Leu Asn Lys Leu Arg Gln Ala Pro  
 20 25 30  
 Asp Phe Tyr Val Glu Met Lys Trp Glu Phe Thr Ser Trp Val Pro Leu  
 35 40 45  
 Val Ser Lys Met Cys Pro Ser Asp Val Tyr Arg Val Trp Lys Arg Gly  
 50 55 60  
 Glu Ser Leu Arg Val Asp Thr Ser Leu Leu Gly Phe Glu His Val Thr  
 65 70 75 80  
 Trp Gln Arg Gly Arg Arg Ser Phe Ile Phe Lys Gly Gln Glu Ala Gly

|   |     |     |
|---|-----|-----|
| 85  | 90  | 95  |
| Ala Leu Val Met Glu Val Asp His Asp Arg Gln Val Val His Val Glu |     |     |
| 100   | 105 | 110 |
| Thr Leu Gly Leu Thr Leu Gln Glu Pro Glu Thr Leu Leu Ala Ala Met |     |     |
| 115   | 120 | 125 |
| Arg Pro Ser Glu Glu His Val Ala Ser Arg Leu Thr Ser Pro Ile Val |     |     |
| 130   | 135 | 140 |
| Ser Thr His Leu Asp Thr Arg Asn Val Ala Phe Glu Arg Asn Lys Cys |     |     |
| 145   | 150 | 155 |
| Gly Ile Trp Gly Trp Arg Ser Glu Lys Met Glu Thr Val Ser Gly Tyr |     |     |
| 165   | 170 | 175 |
| Glu Ala Lys Val Tyr Ser Ala Thr Asn Val Glu Leu Val Thr Arg Thr |     |     |
| 180   | 185 | 190 |
| Arg Thr Glu His Leu Ser Asp Gln Asp Lys Ser Arg Ser Lys Ala Gly |     |     |
| 195   | 200 | 205 |
| Lys Thr Pro Phe Gln Ser Phe Leu Gly Met Ala Gln Gln His Ser Ser |     |     |
| 210   | 215 | 220 |
| His Thr Gly Ala Pro Val Gln Gln Ala Ala Ser Pro Thr Asn Pro Thr |     |     |
| 225   | 230 | 235 |
| Ala Ile Ser Pro Glu Glu Tyr Phe Asp Pro Asn Phe Ser Leu Glu Ser |     |     |
| 245   | 250 | 255 |
| Arg Asn Ile Gly Arg Pro Ile Glu Met Ser Ser Lys Val Gln Arg Phe |     |     |
| 260   | 265 | 270 |
| Lys Ala Thr Leu Trp Leu Ser Glu Glu His Pro Leu Ser Leu Gly Asp |     |     |
| 275   | 280 | 285 |
| Gln Val Thr Pro Ile Ile Asp Leu Met Ala Ile Ser Asn Ala His Phe |     |     |
| 290   | 295 | 300 |
| Ala Lys Leu Arg Asp Phe Ile Thr Leu Arg Leu Pro Pro Gly Phe Pro |     |     |
| 305   | 310 | 315 |
|   |     | 320 |

Val Lys Ile Glu Ile Pro Leu Phe His Val Leu Asn Ala Arg Ile Thr  
 325 330 335  
 Phe Ser Asn Leu Cys Gly Cys Asp Glu Pro Leu Ser Ser Val Trp Val  
 340 345 350  
 Pro Ala Pro Ser Ser Ala Val Ala Ala Ser Gly Asn Pro Phe Pro Cys  
 355 360 365  
 Glu Val Asp Pro Thr Val Phe Glu Val Pro Asn Gly Tyr Ser Val Leu  
 370 375 380  
 Gly Met Glu Arg Asn Glu Pro Leu Arg Asp Glu Asp Asp Asp Leu Leu  
 385 390 395 400  
 Gln Phe Ala Ile Gln Gln Ser Leu Leu Glu Ala Gly Thr Glu Ala Glu  
 405 410 415  
 Gln Val Thr Val Trp Glu Ala Leu Thr Asn Thr Arg Pro Gly Ala Arg  
 420 425 430  
 Pro Pro Pro Gln Ala Thr Val Tyr Glu Glu Gln Leu Gln Leu Glu Arg  
 435 440 445  
 Ala Leu Gln Glu Ser Leu Gln Leu Ser Thr Glu Pro Arg Gly Pro Gly  
 450 455 460  
 Ser Pro Pro Arg Thr Pro Pro Ala Pro Gly Pro Pro Ser Phe Glu Glu  
 465 470 475 480  
 Gln Leu Arg Leu Ala Leu Glu Leu Ser Ser Arg Glu Gln Glu Glu Arg  
 485 490 495  
 Glu Arg Arg Gly Gln Gln Glu Glu Glu Asp Leu Gln Arg Ile Leu Gln  
 500 505 510  
 Leu Ser Leu Thr Glu His  
 515

&lt;210&gt; 2523

&lt;211&gt; 103

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2523

Met Thr Ala Pro Ala Arg Arg Ser Arg Ser Leu Arg Pro Gly Met Trp

1 5 10 15

Ser Pro Lys Glu Trp Trp Glu Pro Gln Pro Gly Arg Asp Ala Ala Ala

20 25 30

Ala Arg Ala Arg Ser Pro Tyr Pro Gly His Leu Trp Lys Pro Ala His

35 40 45

Leu Leu His Gln Pro Phe Pro Asn Thr Val Val Pro Pro Leu Pro Ser

50 55 60

Leu Leu Lys Asn Arg Ile Val Trp Gly Ser Gly Ile Phe Trp Thr Pro

65 70 75 80

Gly Thr Pro Ile Arg Leu Pro Leu Val Pro Leu Leu Gln Ser Asn Glu

85 90 95

Val Cys Phe Gly Phe Val Tyr

100

&lt;210&gt; 2524

&lt;211&gt; 128

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2524

Met Gly Thr Arg Ser Phe Cys Pro Ile Met Gly Thr Arg Ser Phe Cys

1 5 10 15

Pro Ile Val Gly Ser Thr Leu Leu Leu Pro Asn His Trp Ala His Ala  
                     20                    25                    30  
 Pro Ser Ala Arg Ser Leu Gly Ser Arg Ser Phe Cys Pro Ile Leu Gly  
                     35                    40                    45  
 Ala Arg Ser Phe Cys Pro Ile Val Gly Arg Thr Leu Leu Leu Pro Asp  
                     50                    55                    60  
 Arg Trp Ala His Ala Pro Ser Ala Arg Ser Leu Gly Ala Arg Ser Phe  
                     65                    70                    75                    80  
 Cys Pro Ile Val Gly Ser Thr Leu Leu Leu Pro Asp Arg Trp Ala His  
                     85                    90                    95  
 Ala Pro Ser Ala Arg Ser Leu Gly Ala Arg Phe Phe Cys Leu Ile Val  
                     100                    105                    110  
 Gly Arg Thr Leu Leu Leu Pro Asp Arg Trp Ala His Ala Pro Ser Ala  
                     115                    120                    125

&lt;210&gt; 2525

&lt;211&gt; 131

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2525

Met Ala Ser Gln Pro Glu Ala Thr Ala Gly His His Leu Gly Pro Ala  
                     1                    5                    10                    15  
 Ser Pro Pro Thr Arg Gly Arg Gln Ser Pro Pro Ser Leu Val Gly Asp  
                     20                    25                    30  
 Gly Asn Arg Ala Cys Cys Cys His Leu Ala Ala Asn Ser Gly Asn Glu  
                     35                    40                    45  
 Ser Arg His Ala His Tyr Pro Ala Thr Leu Pro Ile Leu Thr Leu Tyr

50                      55                      60  
 Val Lys Gln Asn Ser Arg Phe Arg Ser Glu Leu Ser Glu Gly Val Val  
 65                      70                      75                      80  
 Pro Val Leu Leu Val Gly Lys Leu Arg Leu Arg Glu Ala Glu Asp Leu  
                          85                      90                      95  
 Pro Lys Ile Thr Pro Pro Gly Pro Arg Ile Gln Ala Gln Ala Cys Pro  
                          100                      105                      110  
 Gly Ser Leu Trp Pro Pro Gly Cys Glu Glu Ala Ala Arg Asp Gln Val  
                          115                      120                      125  
 Pro Pro Phe  
                          130

<210> 2526

<211> 842

<212> PRT

<213> Homo sapiens

<400> 2526

Met Asp Phe Lys Val Gly Ala Asp Gly Thr Val Phe Ala Ala Arg Glu  
   1                      5                      10                      15  
 Leu Gln Val Pro Ser Glu Gln Val Ala Phe Thr Val Thr Ala Trp Asp  
                          20                      25                      30  
 Ser Gln Thr Ala Glu Lys Trp Asp Ala Val Val Arg Leu Leu Val Ala  
                          35                      40                      45  
 Gln Thr Ser Ser Pro His Ser Gly His Lys Pro Gln Lys Gly Lys Lys  
                          50                      55                      60  
 Val Val Ala Leu Asp Pro Ser Pro Pro Pro Lys Asp Thr Leu Leu Pro  
                          65                      70                      75                      80



Trp Pro Gln His Gln Asn Ala Asn Gly Leu Arg Arg Arg Lys Arg Asp  
85 90 95  
Trp Val Ile Pro Pro Ile Asn Val Pro Glu Asn Ser Arg Gly Pro Phe  
100 105 110  
Pro Gln Gln Leu Val Arg Ile Arg Ser Asp Lys Asp Asn Asp Ile Pro  
115 120 125  
Ile Arg Tyr Ser Ile Thr Gly Val Gly Ala Asp Gln Pro Pro Met Glu  
130 135 140  
Val Phe Ser Ile Asp Ser Met Ser Gly Arg Met Tyr Val Thr Arg Pro  
145 150 155 160  
Met Asp Arg Glu Glu His Ala Ser Tyr His Leu Arg Ala His Ala Val  
165 170 175  
Asp Met Asn Gly Asn Lys Val Glu Asn Pro Ile Asp Leu Tyr Ile Tyr  
180 185 190  
Val Ile Asp Met Asn Asp Asn Arg Pro Glu Phe Ile Asn Gln Val Tyr  
195 200 205  
Asn Gly Ser Val Asp Glu Gly Ser Lys Pro Gly Thr Tyr Val Met Thr  
210 215 220  
Val Thr Ala Asn Asp Ala Asp Asp Ser Thr Thr Ala Asn Gly Met Val  
225 230 235 240  
Arg Tyr Arg Ile Val Thr Gln Thr Pro Gln Ser Pro Ser Gln Asn Met  
245 250 255  
Phe Thr Ile Asn Ser Glu Thr Gly Asp Ile Val Thr Val Ala Ala Gly  
260 265 270  
Leu Asp Arg Glu Lys Val Gln Gln Tyr Thr Val Ile Val Gln Ala Thr  
275 280 285  
Asp Met Glu Gly Asn Leu Asn Tyr Gly Leu Ser Asn Thr Ala Thr Ala  
290 295 300  
Ile Ile Thr Val Thr Asp Val Asn Asp Asn Pro Pro Glu Phe Thr Ala

305                      310                      315                      320  
Ser Thr Phe Ala Gly Glu Val Pro Glu Asn Arg Val Glu Thr Val Val  
                         325                      330                      335  
Ala Asn Leu Thr Val Met Asp Arg Asp Gln Pro His Ser Pro Asn Trp  
                         340                      345                      350  
Asn Ala Val Tyr Arg Ile Ile Ser Gly Asp Pro Ser Gly His Phe Ser  
                         355                      360                      365  
Val Arg Thr Asp Pro Val Thr Asn Glu Gly Met Val Thr Val Val Lys  
                         370                      375                      380  
Ala Val Asp Tyr Glu Leu Asn Arg Ala Phe Met Leu Thr Val Met Val  
385                      390                      395                      400  
Ser Asn Gln Ala Pro Leu Ala Ser Gly Ile Gln Met Ser Phe Gln Ser  
                         405                      410                      415  
Thr Ala Gly Val Thr Ile Ser Ile Met Asp Ile Ser Glu Ala Pro Tyr  
                         420                      425                      430  
Phe Pro Ser Asn His Lys Leu Ile Arg Leu Glu Glu Gly Val Pro Pro  
                         435                      440                      445  
Gly Thr Val Leu Thr Thr Phe Ser Ala Val Asp Pro Asp Arg Phe Met  
                         450                      455                      460  
Gln Arg Ala Val Arg Tyr Ser Lys Leu Ser Asp Pro Ala Ser Trp Leu  
465                      470                      475                      480  
His Ile Asn Ala Thr Asn Gly Gln Ile Thr Thr Ala Ala Val Leu Asp  
                         485                      490                      495  
Arg Glu Ser Leu Tyr Thr Lys Asn Asn Val Tyr Glu Ala Thr Phe Leu  
                         500                      505                      510  
Ala Ala Asp Asn Gly Ile Pro Pro Ala Ser Gly Thr Gly Thr Leu Gln  
                         515                      520                      525  
Ile Tyr Leu Ile Asp Ile Asn Asp Asn Ala Pro Glu Leu Leu Pro Lys  
                         530                      535                      540

Glu Ala Gln Ile Cys Glu Lys Pro Asn Leu Asn Ala Ile Asn Ile Thr  
545 550 555 560  
Ala Ala Asp Ala Asp Val Asp Pro Asn Ile Gly Pro Tyr Val Phe Glu  
565 570 575  
Leu Pro Phe Val Pro Ala Ala Val Arg Lys Asn Trp Thr Ile Thr Arg  
580 585 590  
Leu Asn Gly Asp Tyr Ala Gln Leu Ser Leu Arg Ile Leu Tyr Leu Glu  
595 600 605  
Ala Gly Met Tyr Asp Val Pro Ile Ile Val Thr Asp Ser Gly Asn Pro  
610 615 620  
Pro Leu Ser Asn Thr Ser Ile Ile Lys Val Lys Val Cys Pro Cys Asp  
625 630 635 640  
Asp Asn Gly Asp Cys Thr Thr Ile Gly Ala Val Ala Ala Ala Gly Leu  
645 650 655  
Gly Thr Gly Ala Ile Val Ala Ile Leu Ile Cys Ile Leu Ile Leu Leu  
660 665 670  
Thr Met Val Leu Leu Phe Val Met Trp Met Lys Arg Arg Glu Lys Glu  
675 680 685  
Arg His Thr Lys Gln Leu Leu Ile Asp Pro Glu Asp Asp Val Arg Asp  
690 695 700  
Asn Ile Leu Lys Tyr Asp Glu Glu Gly Gly Gly Glu Glu Asp Gln Asp  
705 710 715 720  
Tyr Asp Leu Ser Gln Leu Gln Gln Pro Glu Ala Met Gly His Val Pro  
725 730 735  
Ser Lys Ala Pro Gly Val Arg Arg Val Asp Glu Arg Pro Val Gly Ala  
740 745 750  
Glu Pro Gln Tyr Pro Ile Arg Pro Met Val Pro His Pro Gly Asp Ile  
755 760 765  
Gly Asp Phe Ile Asn Glu Gly Leu Arg Ala Ala Asp Asn Asp Pro Thr

770                      775                      780  
 Ala Pro Pro Tyr Asp Ser Leu Leu Val Phe Asp Tyr Glu Gly Ser Gly  
 785                      790                      795                      800  
 Ser Thr Ala Gly Ser Val Ser Ser Leu Asn Ser Ser Ser Ser Gly Asp  
                          805                      810                      815  
 Gln Asp Tyr Asp Tyr Leu Asn Asp Trp Gly Pro Arg Phe Lys Lys Leu  
                          820                      825                      830  
 Ala Asp Met Tyr Gly Gly Gly Glu Glu Asp  
                          835                      840

<210> 2527

<211> 230

<212> PRT

<213> Homo sapiens

<400> 2527

Met His Ala Ala Ala His Pro Gly Leu Cys Pro Leu Arg Leu Cys His  
     1                      5                      10                      15  
 Asp Thr Ala Asp Arg Ala Gly Glu Ala Ala Pro Ala Leu Lys Val Ala  
                          20                      25                      30  
 Ala Ala Phe Arg Ala Gly Trp Arg Asp Leu Pro His Ser Pro Thr Leu  
                          35                      40                      45  
 Gly Leu Arg Gly Pro Gly Lys Pro Leu Gln Glu Gly Thr Arg Ser Ser  
                          50                      55                      60  
 Ser Gly Phe Trp Ser Gly Val Pro Ala Ala Ala Glu Ala Ser Gly Gly  
                          65                      70                      75                      80  
 Asn Thr Thr Lys Lys Gly Arg Gln Leu Gly Pro Ser Lys Gly Val Ala  
                          85                      90                      95

Thr Arg Ala Gln Gln Pro Arg Ser Val Thr Ala Gln Ser Ser Ala Pro  
 100 105 110  
 Ala Phe Pro Ser Leu Cys Gln Gly Leu Met Ala Lys Pro Ala Leu Gly  
 115 120 125  
 Ala Phe Phe Pro Val Pro Ile Trp Leu Leu Cys Cys Thr Lys Leu Gly  
 130 135 140  
 Ser Gln Pro Ala Lys Ser Arg Leu Gly Leu Ala Ser Pro Leu Ala Gly  
 145 150 155 160  
 Leu Glu Val Gly Arg Val Gly Cys Gly Ala Ser Ser Leu Cys Val Gly  
 165 170 175  
 Pro Gly Arg Trp Leu Lys Ser Pro Leu Gln Glu Arg Ile Lys Val Ser  
 180 185 190  
 Arg Val Val Arg Lys Pro Glu Ser Gly Ser Pro Asp Ser Ser Leu Trp  
 195 200 205  
 Gly Ala Phe Phe Met Phe Ser Gln Leu Phe Gln Asp Trp Ala Val Glu  
 210 215 220  
 Phe His Val Ser Gly Ala  
 225 230

&lt;210&gt; 2528

&lt;211&gt; 473

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2528

Met Ala Leu Lys Asp Thr Gly Ser Gly Gly Ser Thr Ile Leu Pro Ile  
 1 5 10 15  
 Ser Glu Met Val Ser Ser Ser Ser Ser Pro Gly Ala Ser Ala Ala Ala

|   |     |     |
|---|-----|-----|
| 20  | 25  | 30  |
| Ala Pro Gly Pro Cys Ala Pro Ser Pro Phe Pro Glu Val Val Glu Leu |     |     |
| 35  | 40  | 45  |
| Asn Val Gly Gly Gln Val Tyr Val Thr Lys His Ser Thr Leu Leu Ser |     |     |
| 50  | 55  | 60  |
| Val Pro Asp Ser Thr Leu Ala Ser Met Phe Ser Pro Ser Ser Pro Arg |     |     |
| 65  | 70  | 75  |
| Gly Gly Ala Arg Arg Arg Gly Glu Leu Pro Arg Asp Ser Arg Ala Arg |     |     |
| 85  | 90  | 95  |
| Phe Phe Ile Asp Arg Asp Gly Phe Leu Phe Arg Tyr Val Leu Asp Tyr |     |     |
| 100   | 105 | 110 |
| Leu Arg Asp Lys Gln Leu Ala Leu Pro Glu His Phe Pro Glu Lys Glu |     |     |
| 115   | 120 | 125 |
| Arg Leu Leu Arg Glu Ala Glu Tyr Phe Gln Leu Thr Asp Leu Val Lys |     |     |
| 130   | 135 | 140 |
| Leu Leu Ser Pro Lys Val Thr Lys Gln Asn Ser Leu Asn Asp Glu Gly |     |     |
| 145   | 150 | 155 |
| Cys Gln Ser Asp Leu Glu Asp Asn Val Ser Gln Gly Ser Ser Asp Ala |     |     |
| 165   | 170 | 175 |
| Leu Leu Leu Arg Gly Ala Ala Ala Ala Val Pro Ser Gly Pro Gly Ala |     |     |
| 180   | 185 | 190 |
| His Gly Gly Gly Gly Gly Gly Gly Ala Gln Asp Lys Arg Ser Gly Phe |     |     |
| 195   | 200 | 205 |
| Leu Thr Leu Gly Tyr Arg Gly Ser Tyr Thr Thr Val Arg Asp Asn Gln |     |     |
| 210   | 215 | 220 |
| Ala Asp Ala Lys Phe Arg Arg Val Ala Arg Ile Met Val Cys Gly Arg |     |     |
| 225   | 230 | 235 |
| Ile Ala Leu Ala Lys Glu Val Phe Gly Asp Thr Leu Asn Glu Ser Arg |     |     |
| 245   | 250 | 255 |

Asp Pro Asp Arg Gln Pro Glu Lys Tyr Thr Ser Arg Phe Tyr Leu Lys  
260 265 270  
Phe Thr Tyr Leu Glu Gln Ala Phe Asp Arg Leu Ser Glu Ala Gly Phe  
275 280 285  
His Met Val Ala Cys Asn Ser Ser Gly Thr Ala Ala Phe Val Asn Gln  
290 295 300  
Tyr Arg Asp Asp Lys Ile Trp Ser Ser Tyr Thr Glu Tyr Ile Phe Phe  
305 310 315 320  
Arg Pro Pro Gln Lys Ile Val Ser Pro Lys Gln Glu His Glu Asp Arg  
325 330 335  
Lys His Asp Lys Val Thr Asp Lys Gly Ser Glu Ser Gly Thr Ser Cys  
340 345 350  
Asn Glu Leu Ser Thr Ser Ser Cys Asp Ser His Ser Glu Ala Ser Thr  
355 360 365  
Pro Gln Asp Asn Pro Ser Ser Ala Gln Gln Ala Thr Ala His Gln Pro  
370 375 380  
Asn Thr Leu Thr Leu Asp Arg Pro Ser Lys Lys Ala Pro Val Gln Trp  
385 390 395 400  
Ile Pro Pro Pro Asp Lys Arg Arg Asn Ser Glu Leu Phe Gln Thr Leu  
405 410 415  
Ile Ser Lys Ser Arg Glu Thr Asn Leu Ser Lys Lys Lys Val Cys Glu  
420 425 430  
Lys Leu Ser Val Glu Glu Glu Met Lys Lys Cys Ile Gln Asp Phe Lys  
435 440 445  
Lys Ile His Ile Pro Asp Tyr Phe Pro Glu Arg Lys Arg Gln Trp Gln  
450 455 460  
Ser Glu Leu Leu Gln Lys Tyr Gly Leu  
465 470

&lt;210&gt; 2529

&lt;211&gt; 230

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2529

Met Asp Val Gly Phe Gln Gly Arg Cys Ser Arg Trp Ser Arg Ala Leu

1 5 10 15

Arg Gly Arg Tyr Ser Ser Ala Glu Arg Lys Arg Arg Ala Arg Gln Pro

20 25 30

Arg Glu Pro Arg Glu Gln Ala Pro Arg Val Ser Ala Pro Pro Gly Arg

35 40 45

Leu Pro Ala Phe Phe Pro Gln Phe Ala Leu Leu Pro Gln Ser Gly Pro

50 55 60

Arg Leu Ile Leu Cys Thr Cys Glu Trp Ala His Thr Ser Ser Pro Gly

65 70 75 80

Thr Ile Leu Ser Ser Ile Ser Leu Gly Glu Ser Thr Phe Leu Thr Ile

85 90 95

Asn Leu Leu Ala Thr Ala Gly Lys Val Ala Gly Cys Glu Trp Gly Gly

100 105 110

Glu Gly Arg Phe Thr Arg Ser Glu Ala Pro Lys Leu Ala Ala Ser Ala

115 120 125

Lys Arg Leu Cys Phe Leu Arg Phe Leu Thr Asn Lys Trp Gly Gly Met

130 135 140

Leu Ala Trp Pro Pro Ala Ala Pro Ala Arg Ala Leu Gly Ser Leu Ser

145 150 155 160

Ser Leu Met Pro Ser Phe Arg Arg Ser Pro Ala Ala Leu Thr Pro Gly

165 170 175



Leu Leu Arg Pro Leu Ala Lys Val Cys Ser Pro Met Asp Ala Gly Arg  
 180 185 190  
 Gly Leu Ser Leu Ser Ala Leu Thr Gln Leu Arg Leu Lys Pro Gln Ser  
 195 200 205  
 Ser His Leu Leu Pro Pro Val Tyr Pro Pro Ala Pro Leu Pro Pro Pro  
 210 215 220  
 Lys Asp Val Pro Leu Gln  
 225 230

<210> 2530

<211> 602

<212> PRT

<213> Homo sapiens

<400> 2530

Met Glu Ser His Ser Arg Ala Gly Lys Ser Arg Lys Ser Ala Lys Phe  
 1 5 10 15  
 Arg Ser Ile Ser Arg Ser Leu Met Leu Cys Asn Ala Lys Thr Ser Asp  
 20 25 30  
 Asp Gly Ser Ser Pro Asp Glu Lys Tyr Pro Asp Pro Phe Glu Ile Ser  
 35 40 45  
 Leu Ala Gln Gly Lys Glu Gly Ile Phe His Ser Ser Val Gln Leu Ala  
 50 55 60  
 Asp Thr Ser Glu Ala Gly Pro Ser Ser Val Pro Asp Leu Ala Leu Ala  
 65 70 75 80  
 Ser Glu Ala Ala Gln Leu Gln Ala Ala Gly Asn Asp Arg Gly Lys Thr  
 85 90 95  
 Cys Arg Arg Ile Phe Phe Met Lys Glu Ser Ser Thr Ala Ser Ser Arg

100 105 110  
Glu Lys Pro Gly Lys Leu Glu Ala Gln Ser Ser Asn Phe Leu Phe Pro  
115 120 125  
Lys Ala Cys His Gln Arg Ala Arg Ser Asn Ser Thr Ser Val Asn Pro  
130 135 140  
Tyr Cys Thr Arg Glu Ile Asp Phe Pro Met Thr Lys Lys Ser Ala Ala  
145 150 155 160  
Pro Thr Asp Arg Gln Pro Tyr Ser Leu Cys Ser Asn Arg Lys Ser Leu  
165 170 175  
Ser Gln Gln Leu Asp Cys Pro Ala Gly Lys Ala Ala Gly Thr Ser Arg  
180 185 190  
Pro Thr Arg Ser Leu Ser Thr Ala Gln Leu Val Gln Pro Ser Gly Gly  
195 200 205  
Leu Gln Ala Ser Val Ile Ser Asn Ile Val Leu Met Lys Gly Gln Ala  
210 215 220  
Lys Gly Leu Gly Phe Ser Ile Val Gly Gly Lys Asp Ser Ile Tyr Gly  
225 230 235 240  
Pro Ile Gly Ile Tyr Val Lys Thr Ile Phe Ala Gly Gly Ala Ala Ala  
245 250 255  
Ala Asp Gly Arg Leu Gln Glu Gly Asp Glu Ile Leu Glu Leu Asn Gly  
260 265 270  
Glu Ser Met Ala Gly Leu Thr His Gln Asp Ala Leu Gln Lys Phe Lys  
275 280 285  
Gln Ala Lys Lys Gly Leu Leu Thr Leu Thr Val Arg Thr Arg Leu Thr  
290 295 300  
Ala Pro Pro Ser Leu Cys Ser His Leu Ser Pro Pro Leu Cys Arg Ser  
305 310 315 320  
Leu Ser Ser Ser Thr Cys Ile Thr Lys Asp Ser Ser Ser Phe Ala Leu  
325 330 335

Glu Ser Pro Ser Ala Pro Ile Ser Thr Ala Lys Pro Asn Tyr Arg Ile  
340 345 350  
Met Val Glu Val Ser Leu Gln Lys Glu Ala Gly Val Gly Leu Gly Ile  
355 360 365  
Gly Leu Cys Ser Val Pro Tyr Phe Gln Cys Ile Ser Gly Ile Phe Val  
370 375 380  
His Thr Leu Ser Pro Gly Ser Val Ala His Leu Asp Gly Arg Leu Arg  
385 390 395 400  
Cys Gly Asp Glu Ile Val Glu Ile Ser Asp Ser Pro Val His Cys Leu  
405 410 415  
Thr Leu Asn Glu Val Tyr Thr Ile Leu Ser His Cys Asp Pro Gly Pro  
420 425 430  
Val Pro Ile Ile Val Ser Arg His Pro Asp Pro Gln Val Ser Glu Gln  
435 440 445  
Gln Leu Lys Glu Ala Val Ala Gln Ala Val Glu Asn Thr Lys Phe Gly  
450 455 460  
Lys Glu Arg His Gln Trp Ser Leu Glu Gly Val Lys Arg Leu Glu Ser  
465 470 475 480  
Ser Trp His Gly Arg Pro Thr Leu Glu Lys Glu Arg Glu Lys Asn Ser  
485 490 495  
Ala Pro Pro His Arg Arg Ala Gln Lys Val Met Thr Arg Ser Ser Ser  
500 505 510  
Asp Ser Ser Tyr Met Ser Gly Ser Pro Gly Gly Ser Pro Gly Ser Gly  
515 520 525  
Ser Ala Glu Lys Pro Ser Ser Asp Val Asp Ile Ser Thr His Ser Pro  
530 535 540  
Ser Leu Pro Leu Ala Arg Glu Pro Val Val Leu Ser Ile Ala Ser Ser  
545 550 555 560  
Arg Leu Pro Gln Glu Ser Pro Pro Leu Pro Glu Ser Arg Asp Ser His

|     |     |     |     |     |     |
|-----|-----|-----|-----|-----|-----|
|     | 565 |     | 570 |     | 575 |
| Pro | Pro | Leu | Arg | Leu | Lys |
|     |     |     | Lys | Ser | Phe |
|     |     |     | Glu | Ile | Leu |
|     |     |     | Val | Arg | Lys |
|     |     |     | Pro |     |     |
|     | 580 |     | 585 |     | 590 |
| Met | Ser | Asn | Ile | Ala | Arg |
|     |     |     | Pro | Arg | Ser |
|     |     |     | Pro |     |     |
|     | 595 |     | 600 |     |     |

&lt;210&gt; 2531

&lt;211&gt; 218

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2531

|     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| Met | His | Thr | His | Lys | His | Met | Cys | Ile | Ser | His | Thr | Arg | Thr | His | Pro |
| 1   |     |     |     | 5   |     |     |     |     | 10  |     |     |     |     | 15  |     |
| Asn | Thr | Cys | Ile | Ser | His | Thr | Cys | Thr | His | Thr | Asn | Thr | Cys | Ile | Ser |
|     |     |     |     | 20  |     |     |     | 25  |     |     |     |     | 30  |     |     |
| His | Thr | Cys | Thr | Gln | Thr | Cys | Ile | Ser | His | Thr | Arg | Thr | His | Thr | Gln |
|     |     |     |     | 35  |     |     |     | 40  |     |     |     |     | 45  |     |     |
| Thr | Arg | Ala | Tyr | His | Thr | His | Ala | His | Thr | Gln | Thr | Arg | Ala | Tyr | His |
|     |     |     |     | 50  |     |     |     | 55  |     |     |     |     | 60  |     |     |
| Thr | Gln | Thr | His | Val | His | Thr | Tyr | Leu | Thr | His | Thr | Cys | Thr | Cys | Cys |
|     |     |     |     | 65  |     |     |     | 70  |     |     |     | 75  |     | 80  |     |
| Ala | His | Val | His | Thr | His | Val | Val | Val | Cys | Phe | Pro | Ala | Thr | His | Thr |
|     |     |     |     | 85  |     |     |     |     | 90  |     |     |     | 95  |     |     |
| Leu | Gly | Leu | His | Trp | Arg | Leu | Phe | His | Pro | Ala | Asn | Val | Asn | Val | Ser |
|     |     |     |     | 100 |     |     |     | 105 |     |     |     |     | 110 |     |     |
| Arg | Leu | Val | Gly | Ala | Leu | Cys | Tyr | Pro | Val | Gly | Arg | Ser | His | Gln | Glu |
|     |     |     |     | 115 |     |     |     | 120 |     |     |     |     | 125 |     |     |

Gln Ser Leu Pro Asn Val His Leu Arg Glu Glu Gly Cys Arg Gly Val

130

135

140

Phe Pro Ala Pro Ala Arg Trp Lys Gly Ser Pro Glu Thr Gly Thr Gln

145

150

155

160

Tyr Leu Ser Met Arg Ser Leu Thr Ser Arg Gly Val Gly Lys Leu Asp

165

170

175

Arg Asp Ser Val Thr His Ser Val Leu Leu Pro Ala Asn Pro Val Cys

180

185

190

Pro Tyr Arg Ser Thr Arg Arg Ala Val Gly Gly Pro Pro Gly Gly Ser

195

200

205

Ala Ser Ala Ser Pro Ser His Leu Leu Pro

210

215

<210> 2532

<211> 140

<212> PRT

<213> Homo sapiens

<400> 2532

Met Arg Gln Val Leu Arg Pro Val Phe Gln Val Leu Thr Gly Ala Leu

1

5

10

15

Gly Ala His Arg Arg Glu Tyr Gly Ser Ala Ala Thr Gly Thr Val His

20

25

30

Leu Pro Val Cys Gln Ala Gln Ser Met Asp Lys Pro His Ser Arg Ala

35

40

45

Val His Pro Gly Thr Met His Gly Gln Gln Glu Ser Arg Pro Ala Asp

50

55

60

Ala Lys Arg Ala Tyr Cys Gln Gly Lys Val Pro Ala Pro Ala His Ser

|   |     |     |     |
|---|-----|-----|-----|
| 65  | 70  | 75  | 80  |
| Leu Trp Ile Leu Gly Leu Trp Gly Leu Ser Trp Arg Val Ser Leu Trp |     |     |     |
|   | 85  | 90  | 95  |
| Phe Val Ser Gly Leu Gln Trp Trp Leu Thr Pro Leu Val Arg Lys His |     |     |     |
|   | 100 | 105 | 110 |
| Ser Trp Glu Val Phe Cys Gly Ser Lys His Val Ala Pro Ile Ile Thr |     |     |     |
|   | 115 | 120 | 125 |
| Gly Glu Gln Lys Ala Leu Asp Thr Pro Phe Gly Met                 |     |     |     |
|   | 130 | 135 | 140 |

&lt;210&gt; 2533

&lt;211&gt; 339

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2533

|   |    |    |    |
|---|----|----|----|
| Met Glu Lys Gly Arg Leu Ser Val Gly Asp His Val Ala Leu Val Tyr |    |    |    |
| 1   | 5  | 10 | 15 |
| Pro Pro Gly Val Asp Leu Ile Ala Ala Phe Tyr Gly Cys Leu Tyr Cys |    |    |    |
|   | 20 | 25 | 30 |
| Gly Cys Val Pro Val Thr Val Arg Pro Pro His Pro Gln Asn Leu Gly |    |    |    |
|   | 35 | 40 | 45 |
| Thr Thr Leu Pro Thr Val Lys Met Ile Val Glu Val Gly Lys Ser Ala |    |    |    |
|   | 50 | 55 | 60 |
| Cys Val Leu Thr Thr Gln Ala Val Thr Arg Leu Leu Arg Ser Lys Glu |    |    |    |
|   | 65 | 70 | 75 |
| Ala Ala Ala Ala Val Asp Ile Arg Thr Trp Pro Thr Ile Leu Asp Thr |    |    |    |
|   | 85 | 90 | 95 |

Asp Asp Ile Pro Lys Lys Lys Ile Ala Ser Val Phe Arg Pro Pro Ser  
100 105 110  
Pro Asp Val Leu Ala Tyr Leu Asp Phe Ser Val Ser Thr Thr Gly Ile  
115 120 125  
Leu Ala Gly Val Lys Met Ser His Ala Ala Thr Ser Ala Leu Cys Arg  
130 135 140  
Ser Ile Lys Leu Gln Cys Glu Leu Tyr Pro Ser Arg Gln Ile Ala Ile  
145 150 155 160  
Cys Leu Asp Pro Tyr Cys Gly Leu Gly Phe Ala Leu Trp Cys Leu Cys  
165 170 175  
Ser Val Tyr Ser Gly His Gln Ser Val Leu Val Pro Pro Leu Glu Leu  
180 185 190  
Glu Ser Asn Val Ser Leu Trp Leu Ser Ala Val Ser Gln Tyr Lys Ala  
195 200 205  
Arg Val Thr Phe Cys Ser Tyr Ser Val Met Glu Met Cys Thr Lys Gly  
210 215 220  
Leu Gly Ala Gln Thr Gly Val Leu Arg Met Lys Gly Val Asn Leu Ser  
225 230 235 240  
Cys Val Arg Thr Cys Met Val Val Ala Glu Glu Arg Pro Arg Ile Ala  
245 250 255  
Leu Thr Gln Ser Phe Ser Lys Leu Phe Lys Asp Leu Gly Leu Pro Ala  
260 265 270  
Arg Ala Val Ser Thr Thr Phe Gly Cys Arg Val Asn Val Ala Ile Cys  
275 280 285  
Leu Gln Val Arg Cys Leu Gly Pro Ala Val Leu Glu Ser Trp Leu Leu  
290 295 300  
Ala Ala Trp Arg Pro Ser Phe Pro Val Val Asn Val Pro Phe Cys Ser  
305 310 315 320  
Arg Leu Ile Tyr Phe Ser Phe Ser Gly Pro Leu Ile Ser His Phe His

325

330

335

Val Thr Phe

&lt;210&gt; 2534

&lt;211&gt; 148

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2534

Met Ala Glu Glu Glu Lys Pro Ala Ala Leu Pro Glu Lys Glu Cys Gly

1

5

10

15

Ala Ala Lys Ser Ser Asp Gln Pro Lys Gly Leu Ser Lys Gly Gln Met

20

25

30

Glu Ser Ser Ala Glu Ala Gln Ile Val Pro Glu Glu Ser Ala Pro Ala

35

40

45

Gly Ala Pro His Glu Lys Ser Val Lys Glu Val Lys Glu Val Ser Pro

50

55

60

Glu Val Lys Thr Pro Ser Ser Ala Gly Glu Gly Val Ser Phe Ser Gly

65

70

75

80

Phe Ala Cys Val Leu Leu Gln Met Ile Ser Pro Val Ala Tyr Gln Pro

85

90

95

Asp Ala Phe Pro Thr Leu Phe Arg Tyr Phe Ile Ala Gly Ser Tyr Asp

100

105

110

Asn Lys Ser Thr Val Val Gly Leu Met Cys Arg Glu Cys Gly Leu Arg

115

120

125

Lys Cys Cys Val Ala Ala Gly Phe Pro Val Leu Gln Leu Ile Ser Gly

130

135

140



Phe Pro Leu Pro

145

<210> 2535

<211> 171

<212> PRT

<213> Homo sapiens

<400> 2535

Met Glu Pro Gly Pro Ala Leu Ala Trp Leu Leu Leu Leu Ser Leu Leu

1 5 10 15

Ala Asp Cys Leu Lys Ala Ala Gln Ser Arg Asp Phe Thr Val Lys Asp

20 25 30

Ile Ile Tyr Leu His Pro Ser Thr Thr Pro Tyr Pro Gly Gly Phe Lys

35 40 45

Cys Phe Thr Cys Glu Lys Ala Ala Asp Asn Tyr Glu Cys Asn Arg Trp

50 55 60

Ala Pro Asp Ile Tyr Cys Pro Arg Val Thr Arg Tyr Cys Tyr Thr Gln

65 70 75 80

His Thr Met Glu Val Thr Gly Asn Ser Ile Ser Val Thr Lys Arg Cys

85 90 95

Val Pro Leu Glu Glu Cys Leu Ser Thr Gly Cys Arg Asp Ser Glu His

100 105 110

Glu Gly His Lys Val Cys Thr Ser Cys Cys Glu Gly Asn Ile Cys Asn

115 120 125

Leu Pro Leu Pro Arg Asn Glu Thr Asp Ala Thr Phe Ala Thr Thr Ser

130 135 140

Pro Ile Asn Gln Thr Asn Gly His Pro Arg Cys Met Ser Val Ile Val

145                      150                      155                      160  
Ser Cys Leu Trp Leu Trp Leu Gly Leu Met Leu  
                         165                      170

<210> 2536

<211> 881

<212> PRT

<213> Homo sapiens

<400> 2536

Met Pro Asn Ser Ala Ser Arg Asp Glu Phe Pro Cys Gly Phe Thr Ser  
1                      5                      10                      15  
Pro Ala Asn Arg Gly Ser Leu Ser Thr Asp Lys Asp Thr Ala Tyr Gly  
                         20                      25                      30  
Ser Phe Gln Asn Gly His Gly Ile Lys Arg Glu Asp Ser Arg Gly Ser  
                         35                      40                      45  
Leu Ile Pro Glu Gly Ala Thr Gly Phe Pro Asp Gln Gly Asn Thr Gly  
                         50                      55                      60  
Glu Asn Thr Arg Gln Ser Ser Thr Arg Ser Ser Val Ser Gln Tyr Asn  
65                      70                      75                      80  
Arg Leu Asp Gln Tyr Glu Ile Arg Ser Leu Leu Met Cys Tyr Leu Tyr  
                         85                      90                      95  
Ile Val Lys Met Ile Ser Glu Asp Thr Leu Leu Thr Tyr Trp Asn Lys  
                         100                      105                      110  
Val Ser Pro Gln Glu Leu Ile Asn Ile Leu Ile Leu Leu Glu Val Cys  
                         115                      120                      125  
Leu Phe His Phe Arg Tyr Met Gly Lys Arg Asn Ile Ala Arg Val His  
130                      135                      140

Asp Ala Trp Leu Ser Lys His Phe Gly Ile Asp Arg Lys Ser Gln Thr  
145                      150                      155                      160  
Met Pro Ala Leu Arg Asn Arg Ser Gly Val Met Gln Ala Arg Leu Gln  
                         165                      170                      175  
His Leu Ser Ser Leu Glu Ser Ser Phe Thr Leu Asn His Ser Ser Thr  
                         180                      185                      190  
Thr Thr Glu Ala Asp Ile Phe His Gln Ala Leu Leu Glu Gly Asn Thr  
                         195                      200                      205  
Ala Thr Glu Val Ser Leu Thr Val Leu Asp Thr Ile Ser Phe Phe Thr  
                         210                      215                      220  
Gln Cys Phe Lys Thr Gln Leu Leu Asn Asn Asp Gly His Asn Pro Leu  
225                      230                      235                      240  
Met Lys Lys Val Phe Asp Ile His Leu Ala Phe Leu Lys Asn Gly Gln  
                         245                      250                      255  
Ser Glu Val Ser Leu Lys His Val Phe Ala Ser Leu Arg Ala Phe Ile  
                         260                      265                      270  
Ser Lys Phe Pro Ser Ala Phe Phe Lys Gly Arg Val Asn Met Cys Ala  
                         275                      280                      285  
Ala Phe Cys Tyr Glu Val Leu Lys Cys Cys Thr Ser Lys Ile Ser Ser  
                         290                      295                      300  
Thr Arg Asn Glu Ala Ser Ala Leu Leu Tyr Leu Leu Met Arg Asn Asn  
305                      310                      315                      320  
Phe Glu Tyr Thr Lys Arg Lys Thr Phe Leu Arg Thr His Leu Gln Ile  
                         325                      330                      335  
Ile Ile Ala Val Ser Gln Leu Ile Ala Asp Val Ala Leu Ser Gly Gly  
                         340                      345                      350  
Ser Arg Phe Gln Glu Ser Leu Phe Ile Ile Asn Asn Phe Ala Asn Ser  
                         355                      360                      365  
Asp Arg Pro Met Lys Ala Thr Ala Phe Pro Ala Glu Val Lys Asp Leu

370 375 380  
Thr Lys Arg Ile Arg Thr Val Leu Met Ala Thr Ala Gln Met Lys Glu  
385 390 395 400  
His Glu Lys Asp Pro Glu Met Leu Ile Asp Leu Gln Tyr Ser Leu Ala  
405 410 415  
Lys Ser Tyr Ala Ser Thr Pro Glu Leu Arg Lys Thr Trp Leu Asp Ser  
420 425 430  
Met Ala Lys Ile His Val Lys Asn Gly Asp Phe Ser Glu Ala Ala Met  
435 440 445  
Cys Tyr Val His Val Ala Ala Leu Val Ala Glu Phe Leu His Arg Lys  
450 455 460  
Lys Leu Phe Pro Asn Gly Cys Ser Ala Phe Lys Lys Ile Thr Pro Asn  
465 470 475 480  
Ile Asp Glu Glu Gly Ala Met Lys Glu Asp Ala Gly Met Met Asp Val  
485 490 495  
His Tyr Ser Glu Glu Val Leu Leu Glu Leu Leu Glu Gln Cys Val Asp  
500 505 510  
Gly Leu Trp Lys Ala Glu Arg Tyr Glu Ile Ile Ser Glu Ile Ser Lys  
515 520 525  
Leu Ile Val Pro Ile Tyr Glu Lys Arg Arg Glu Phe Glu Lys Leu Thr  
530 535 540  
Gln Val Tyr Arg Thr Leu His Gly Ala Tyr Thr Lys Ile Leu Glu Val  
545 550 555 560  
Met His Thr Lys Lys Arg Leu Leu Gly Thr Phe Phe Arg Val Ala Phe  
565 570 575  
Tyr Gly Gln Ser Phe Phe Glu Glu Glu Asp Gly Lys Glu Tyr Ile Tyr  
580 585 590  
Lys Glu Pro Lys Leu Thr Gly Leu Ser Glu Ile Ser Leu Arg Leu Val  
595 600 605

Lys Leu Tyr Gly Glu Lys Phe Gly Thr Glu Asn Val Lys Ile Ile Gln  
 610 615 620  
 Asp Ser Asp Lys Val Asn Ala Lys Glu Leu Asp Pro Lys Tyr Ala His  
 625 630 635 640  
 Ile Gln Val Thr Tyr Val Lys Pro Tyr Phe Asp Asp Lys Glu Leu Thr  
 645 650 655  
 Glu Arg Lys Thr Glu Phe Glu Arg Asn His Asn Ile Ser Gly Phe Val  
 660 665 670  
 Phe Glu Ala Pro Tyr Thr Leu Ser Gly Lys Lys Gln Gly Cys Ile Glu  
 675 680 685  
 Glu Gln Cys Lys Arg Arg Thr Ile Leu Thr Thr Ser Asn Ser Phe Pro  
 690 695 700  
 Tyr Val Lys Lys Arg Ile Pro Ile Asn Cys Glu Gln Gln Ile Asn Leu  
 705 710 715 720  
 Lys Pro Ile Asp Val Ala Thr Asp Glu Ile Lys Asp Lys Thr Ala Glu  
 725 730 735  
 Leu Gln Lys Leu Cys Ser Ser Thr Asp Val Asp Met Ile Gln Leu Gln  
 740 745 750  
 Leu Lys Leu Gln Gly Cys Val Ser Val Gln Val Asn Ala Gly Pro Leu  
 755 760 765  
 Ala Tyr Ala Arg Ala Phe Leu Asn Asp Ser Gln Ala Ser Lys Tyr Pro  
 770 775 780  
 Pro Lys Lys Val Ser Glu Leu Lys Asp Met Phe Arg Lys Phe Ile Gln  
 785 790 795 800  
 Ala Cys Ser Ile Ala Leu Glu Leu Asn Glu Arg Leu Ile Lys Glu Asp  
 805 810 815  
 Gln Val Glu Tyr His Glu Gly Leu Lys Ser Asn Phe Arg Asp Met Val  
 820 825 830  
 Lys Glu Leu Ser Asp Ile Ile His Glu Gln Ile Leu Gln Glu Asp Thr

|   |     |     |
|---|-----|-----|
| 835   | 840 | 845 |
| Met His Ser Pro Trp Met Ser Asn Thr Leu His Val Phe Cys Ala Ile |     |     |
| 850   | 855 | 860 |
| Ser Gly Thr Ser Ser Asp Arg Gly Tyr Gly Ser Pro Arg Tyr Ala Glu |     |     |
| 865   | 870 | 875 |
| Val   |     | 880 |

&lt;210&gt; 2537

&lt;211&gt; 580

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2537

|   |     |     |
|---|-----|-----|
| Met His Leu Ser Ala Val Phe Asn Ala Leu Leu Val Ser Val Leu Ala |     |     |
| 1   | 5   | 10  |
| Ala Val Leu Trp Lys His Val Arg Leu Arg Glu His Ala Ala Thr Leu |     |     |
| 20  | 25  | 30  |
| Glu Glu Glu Leu Ala Leu Ser Arg Gln Ala Thr Glu Pro Ala Pro Ala |     |     |
| 35  | 40  | 45  |
| Leu Arg Ile Asp Tyr Pro Lys Ala Leu Gln Ile Leu Met Glu Gly Gly |     |     |
| 50  | 55  | 60  |
| Thr His Met Val Cys Thr Gly Arg Thr His Thr Asp Arg Ile Cys Arg |     |     |
| 65  | 70  | 75  |
| Phe Lys Trp Leu Cys Tyr Ser Asn Glu Ala Glu Glu Phe Ile Phe Phe |     |     |
| 85  | 90  | 95  |
| His Gly Asn Thr Ser Val Met Leu Pro Asn Leu Gly Ser Arg Arg Phe |     |     |
| 100   | 105 | 110 |

Gln Pro Ala Leu Leu Asp Leu Ser Thr Val Glu Asp His Asn Thr Gln  
 115 120 125  
 Tyr Phe Asn Phe Val Glu Leu Pro Ala Ala Ala Leu Arg Phe Met Pro  
 130 135 140  
 Lys Pro Val Phe Val Pro Asp Val Ala Leu Ile Ala Asn Arg Phe Asn  
 145 150 155 160  
 Pro Asp Asn Leu Met His Val Phe His Asp Asp Leu Leu Pro Leu Phe  
 165 170 175  
 Tyr Thr Leu Arg Gln Phe Pro Gly Leu Ala His Glu Ala Arg Leu Phe  
 180 185 190  
 Phe Met Glu Gly Trp Gly Glu Gly Ala His Phe Asp Leu Tyr Lys Leu  
 195 200 205  
 Leu Ser Pro Lys Gln Pro Leu Leu Arg Ala Gln Leu Lys Thr Leu Gly  
 210 215 220  
 Arg Leu Leu Cys Phe Ser His Ala Phe Val Gly Leu Ser Lys Ile Thr  
 225 230 235 240  
 Thr Trp Tyr Gln Tyr Gly Phe Val Gln Pro Gln Gly Pro Lys Ala Asn  
 245 250 255  
 Ile Leu Val Ser Gly Asn Glu Ile Arg Gln Phe Ala Arg Phe Met Thr  
 260 265 270  
 Glu Lys Leu Asn Val Ser His Thr Gly Val Pro Leu Gly Glu Glu Tyr  
 275 280 285  
 Ile Leu Val Phe Ser Arg Thr Gln Asn Arg Leu Ile Leu Asn Glu Ala  
 290 295 300  
 Glu Leu Leu Leu Ala Leu Ala Gln Glu Phe Gln Met Lys Thr Val Thr  
 305 310 315 320  
 Val Ser Leu Glu Asp His Thr Phe Ala Asp Val Val Arg Leu Val Ser  
 325 330 335  
 Asn Ala Ser Met Leu Val Ser Met His Gly Ala Gln Leu Val Thr Thr

|   |     |     |     |
|---|-----|-----|-----|
| 340   | 345 | 350 |     |
| Leu Phe Leu Pro Arg Gly Ala Thr Val Val Glu Leu Phe Pro Tyr Ala |     |     |     |
| 355   | 360 | 365 |     |
| Val Asn Pro Asp His Tyr Thr Pro Tyr Lys Thr Leu Ala Met Leu Pro |     |     |     |
| 370   | 375 | 380 |     |
| Gly Met Asp Leu Gln Tyr Val Ala Trp Arg Asn Met Met Pro Glu Asn |     |     |     |
| 385   | 390 | 395 | 400 |
| Thr Val Thr His Pro Glu Arg Pro Trp Asp Gln Gly Gly Ile Thr His |     |     |     |
| 405   | 410 | 415 |     |
| Leu Asp Arg Ala Glu Gln Ala Arg Ile Leu Gln Ser Arg Glu Val Pro |     |     |     |
| 420   | 425 | 430 |     |
| Arg His Leu Cys Cys Arg Asn Pro Glu Trp Leu Phe Arg Ile Tyr Gln |     |     |     |
| 435   | 440 | 445 |     |
| Asp Thr Lys Val Asp Ile Pro Ser Leu Ile Gln Thr Ile Arg Arg Val |     |     |     |
| 450   | 455 | 460 |     |
| Val Lys Gly Arg Pro Gly Pro Arg Lys Gln Lys Trp Thr Val Gly Leu |     |     |     |
| 465   | 470 | 475 | 480 |
| Tyr Pro Gly Lys Val Arg Glu Ala Arg Cys Gln Ala Ser Val His Gly |     |     |     |
| 485   | 490 | 495 |     |
| Ala Ser Glu Ala Arg Leu Thr Val Ser Trp Gln Ile Pro Trp Asn Leu |     |     |     |
| 500   | 505 | 510 |     |
| Lys Tyr Leu Lys Val Arg Glu Val Lys Tyr Glu Val Trp Leu Gln Glu |     |     |     |
| 515   | 520 | 525 |     |
| Gln Gly Glu Asn Thr Tyr Val Pro Tyr Ile Leu Ala Leu Gln Asn His |     |     |     |
| 530   | 535 | 540 |     |
| Thr Phe Thr Glu Asn Ile Lys Pro Phe Thr Thr Tyr Leu Val Trp Val |     |     |     |
| 545   | 550 | 555 | 560 |
| Arg Cys Ile Phe Asn Lys Ile Leu Leu Gly Pro Phe Ala Asp Val Leu |     |     |     |
| 565   | 570 | 575 |     |



Val Cys Asn Thr

580

&lt;210&gt; 2538

&lt;211&gt; 105

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2538

Met Ser Leu Met Ser Val Thr Met Ser Phe Leu Ile Cys Ala Pro Gly

1 5 10 15

Glu Gly Gly Cys Gly Glu Asp Pro Val Cys Arg His Cys Val Pro Trp

20 25 30

Gln Ser Arg Gly Ala Pro Cys Gly Trp Pro Ala Lys Val Tyr Val Pro

35 40 45

Leu Arg Ala Glu Gly Lys Arg Gln Pro Arg Ser Cys Ala Ser Arg His

50 55 60

Leu Met Gly His Val Ser Gln Ile Cys Lys Ser Lys Ile Leu Ala Ser

65 70 75 80

Tyr Leu Leu Cys Arg Ile Asn Asn Phe Asn Asn Asn Gly Asn Trp Val

85 90 95

Met Asp Gly Thr Ala Ala Ile Arg Leu

100 105

&lt;210&gt; 2539

&lt;211&gt; 107

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2539

```

Met Ala Glu Glu Gly Ser Ala Ala Gly Gly Val Met Asp Ile Asn Thr
  1             5             10             15
Val Leu Gln Glu Val Leu Lys Thr Ala Leu Ile His Asp Gly Leu Ala
          20             25             30
Tyr Glu Ile Cys Lys Ala Ala Lys Ala Ser Asp Lys Cys Gln Ala His
          35             40             45
Leu Cys Val Leu Cys Val Leu Ala Ser Asn Cys Asp Glu Pro Met Tyr
          50             55             60
Val Lys Leu Val Glu Ala Leu Cys Ala Glu His Gln Ile Asn Leu Ile
          65             70             75             80
Lys Val Asp Asp Gln Lys Leu Gly Glu Ser Val Gly Leu Cys Lys Thr
          85             90             95
Asp Arg Glu Gly Lys Pro Cys Lys Val Val Gly
          100             105

```

&lt;210&gt; 2540

&lt;211&gt; 304

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2540

```

Met Phe Ser Val Leu Ser Tyr Gly Arg Leu Val Ala Arg Ala Val Leu
  1             5             10             15
Gly Gly Leu Ser Gln Thr Asp Pro Arg Ala Gly Gly Gly Gly Gly Gly
          20             25             30

```

Asp Tyr Gly Leu Val Thr Ala Gly Cys Gly Phe Gly Lys Asp Phe Arg  
 35 40 45  
 Lys Gly Leu Leu Lys Lys Gly Ala Cys Tyr Gly Asp Asp Ala Cys Phe  
 50 55 60  
 Val Ala Arg His Arg Ser Ala Asp Val Leu Gly Val Ala Asp Gly Val  
 65 70 75 80  
 Gly Gly Trp Arg Asp Tyr Gly Val Asp Pro Ser Gln Phe Ser Gly Thr  
 85 90 95  
 Leu Met Arg Thr Cys Glu Arg Leu Val Lys Glu Gly Arg Phe Val Pro  
 100 105 110  
 Ser Asn Pro Ile Gly Ile Leu Thr Thr Ser Tyr Cys Glu Leu Leu Gln  
 115 120 125  
 Asn Lys Val Pro Leu Leu Gly Ser Ser Thr Ala Cys Ile Val Val Leu  
 130 135 140  
 Asp Arg Thr Ser His Arg Leu His Thr Ala Asn Leu Gly Asp Ser Gly  
 145 150 155 160  
 Phe Leu Val Val Arg Gly Gly Glu Val Val His Arg Ser Asp Glu Gln  
 165 170 175  
 Gln His Tyr Phe Asn Thr Pro Phe Gln Leu Ser Ile Ala Pro Pro Glu  
 180 185 190  
 Ala Glu Gly Val Val Leu Ser Asp Ser Pro Asp Ala Ala Asp Ser Thr  
 195 200 205  
 Ser Phe Asp Val Gln Leu Gly Asp Ile Ile Leu Thr Ala Thr Asp Gly  
 210 215 220  
 Leu Phe Asp Asn Met Pro Asp Tyr Met Ile Leu Gln Glu Leu Lys Lys  
 225 230 235 240  
 Leu Lys Asn Ser Asn Tyr Glu Ser Ile Gln Gln Thr Ala Arg Ser Ile  
 245 250 255  
 Ala Glu Gln Ala His Glu Leu Ala Tyr Asp Pro Asn Tyr Met Ser Pro

260                      265                      270  
 Phe Ala Gln Phe Ala Cys Asp Asn Gly Leu Asn Val Arg Gly Gly Lys  
 275                      280                      285  
 Pro Asp Asp Ile Thr Val Leu Leu Ser Ile Val Ala Glu Tyr Thr Asp  
 290                      295                      300

<210> 2541

<211> 100

<212> PRT

<213> Homo sapiens

<400> 2541

Met Lys Ser Leu Leu Ser Pro Arg Leu Glu Cys Ser Gly Val Ile Ser  
 1                      5                      10                      15  
 Ala His Cys Asn Leu Cys Leu Leu Ser Ser Ser Asp Ser Leu Ala Ser  
 20                      25                      30  
 Ala Ser His Val Ala Gly Ile Thr Gly Ala His His Gln Thr Trp Leu  
 35                      40                      45  
 Ile Ser Ser Arg Asp Arg Val Ser Pro Cys Trp Pro Gly Trp Ser Leu  
 50                      55                      60  
 Thr Pro Asp Leu Arg Arg Ser Ala Cys Leu Gly Leu Ser Lys Cys Trp  
 65                      70                      75                      80  
 Asp Tyr Arg His Glu Pro Pro Arg Thr Ala Gly Lys Gly Leu Leu Asp  
 85                      90                      95  
 Gln Asn Ile Gln  
 100

&lt;210&gt; 2542

&lt;211&gt; 376

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2542

Met Asn Thr Ile Asp Met Tyr Asn Val Thr Arg Pro Ile Glu Lys Leu

1 5 10 15

Gln Asn Pro Ile Val Thr Gln Phe Phe Pro Ser Val Met Leu Trp Gly

20 25 30

Phe Thr Val Ile Leu Pro Leu Ile Val Tyr Phe Ser Ala Phe Leu Glu

35 40 45

Ala His Trp Thr Arg Ser Ser Gln Asn Leu Val Met Val His Lys Cys

50 55 60

Tyr Ile Phe Leu Val Phe Met Val Val Ile Leu Pro Ser Met Gly Leu

65 70 75 80

Thr Ser Leu Asp Val Phe Leu Arg Trp Leu Phe Asp Ile Tyr Tyr Leu

85 90 95

Glu Gln Ala Ser Ile Arg Phe Gln Cys Val Phe Leu Pro Asp Asn Gly

100 105 110

Ala Phe Phe Val Asn Tyr Val Ile Thr Ala Ala Leu Leu Gly Thr Gly

115 120 125

Met Glu Leu Leu Arg Leu Gly Ser Leu Phe Cys Tyr Ser Thr Arg Leu

130 135 140

Phe Phe Ser Arg Ser Glu Pro Glu Arg Val Asn Ile Arg Lys Asn Gln

145 150 155 160

Ala Ile Asp Phe Gln Phe Gly Arg Glu Tyr Ala Trp Met Met Asn Val

165 170 175

Phe Ser Val Val Met Ala Tyr Ser Ile Thr Cys Pro Ile Ile Val Pro

|   |     |     |
|---|-----|-----|
| 180   | 185 | 190 |
| Phe Gly Leu Leu Tyr Leu Cys Met Lys His Leu Ala Asp Arg Tyr Asn |     |     |
| 195   | 200 | 205 |
| Met Tyr Tyr Ser Phe Ala Pro Thr Lys Leu Asn Glu Gln Ile His Met |     |     |
| 210   | 215 | 220 |
| Ala Ala Val Ser Gln Ala Ile Phe Ala Pro Leu Leu Gly Leu Phe Trp |     |     |
| 225   | 230 | 235 |
| Met Leu Phe Phe Ser Ile Leu Arg Leu Gly Ser Leu His Ala Ile Thr |     |     |
| 245   | 250 | 255 |
| Ile Phe Ser Leu Ser Thr Leu Leu Ile Ala Met Val Ile Ala Phe Val |     |     |
| 260   | 265 | 270 |
| Gly Ile Phe Leu Gly Lys Leu Arg Met Val Ala Asp Tyr Glu Pro Glu |     |     |
| 275   | 280 | 285 |
| Glu Glu Glu Ile Gln Thr Val Phe Asp Met Glu Pro Ser Ser Thr Ser |     |     |
| 290   | 295 | 300 |
| Ser Thr Pro Thr Ser Leu Leu Tyr Val Ala Thr Val Leu Gln Glu Pro |     |     |
| 305   | 310 | 315 |
| Glu Leu Asn Leu Thr Pro Ala Ser Ser Pro Ala Arg His Thr Tyr Gly |     |     |
| 325   | 330 | 335 |
| Thr Met Asn Asn Gln Pro Glu Glu Gly Glu Glu Glu Ser Gly Leu Arg |     |     |
| 340   | 345 | 350 |
| Gly Phe Ala Arg Glu Leu Asp Ser Ala Gln Phe Gln Glu Gly Leu Glu |     |     |
| 355   | 360 | 365 |
| Leu Glu Gly Gln Asn Gln Tyr His                                 |     |     |
| 370   | 375 |     |

&lt;210&gt; 2543

&lt;211&gt; 210

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2543

|     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| Met | Lys | Met | Ile | Leu | Ala | Trp | Arg | Leu | Pro | Leu | Ile | Tyr | Pro | His | Val |
| 1   |     |     | 5   |     |     |     |     | 10  |     |     |     |     | 15  |     |     |
| Ser | Leu | Phe | Ile | Pro | Gln | Leu | Ser | Gly | Gln | Thr | Asn | Ile | His | Leu | Ser |
|     |     |     | 20  |     |     |     |     | 25  |     |     |     |     | 30  |     |     |
| Lys | Asn | Phe | Phe | Leu | Thr | Asn | Arg | Ala | Arg | Glu | Arg | Ser | Asp | Thr | Phe |
|     |     |     | 35  |     |     |     |     | 40  |     |     |     |     | 45  |     |     |
| Ile | Asn | Leu | Arg | Glu | Val | Leu | Asn | Arg | Phe | Lys | Leu | Pro | Pro | Gly | Glu |
|     |     |     | 50  |     |     |     |     | 55  |     |     |     |     | 60  |     |     |
| Tyr | Ile | Leu | Val | Pro | Ser | Thr | Phe | Glu | Pro | Asn | Lys | Asp | Gly | Asp | Phe |
|     |     |     | 65  |     |     |     |     | 70  |     |     |     |     | 75  |     | 80  |
| Cys | Ile | Arg | Val | Phe | Ser | Glu | Lys | Lys | Ala | Asp | Tyr | Gln | Ala | Val | Asp |
|     |     |     | 85  |     |     |     |     | 90  |     |     |     |     | 95  |     |     |
| Asp | Glu | Ile | Glu | Ala | Asn | Leu | Glu | Glu | Phe | Asp | Ile | Ser | Glu | Asp | Asp |
|     |     |     | 100 |     |     |     |     | 105 |     |     |     |     | 110 |     |     |
| Ile | Asp | Asp | Gly | Phe | Arg | Arg | Leu | Phe | Ala | Gln | Leu | Ala | Gly | Glu | Asp |
|     |     |     | 115 |     |     |     |     | 120 |     |     |     |     | 125 |     |     |
| Ala | Glu | Ile | Ser | Ala | Phe | Glu | Leu | Gln | Thr | Ile | Leu | Arg | Arg | Val | Leu |
|     |     |     | 130 |     |     |     |     | 135 |     |     |     |     | 140 |     |     |
| Ala | Lys | Arg | Gln | Asp | Ile | Lys | Ser | Asp | Gly | Phe | Ser | Ile | Glu | Thr | Cys |
|     |     |     | 145 |     |     |     |     | 150 |     |     |     |     | 155 |     | 160 |
| Lys | Ile | Met | Val | Asp | Met | Leu | Asp | Ser | Asp | Gly | Ser | Gly | Lys | Leu | Gly |
|     |     |     | 165 |     |     |     |     | 170 |     |     |     |     | 175 |     |     |
| Leu | Lys | Glu | Phe | Tyr | Ile | Leu | Trp | Thr | Lys | Ile | Gln | Lys | Tyr | Gln | Val |
|     |     |     | 180 |     |     |     |     | 185 |     |     |     |     | 190 |     |     |
| Arg | Ser | Gln | Arg | Cys | Gly | Trp | Ile | Cys | Val | Gly | Lys | His | Ser | Val | His |

出証特 2 0 0 4 - 3 0 5 9 6 6 0



Asp Ser Asp Gln Gly Ala Asn Ala Lys Phe Asn Leu Gln Leu Val Gly  
145 150 155 160  
Pro Arg Gly Ile Phe Arg Val Val Pro Gln Thr Val Leu Asn Glu Ala  
165 170 175  
Gln Val Thr Ile Ile Val Glu Asn Ser Ala Ala Ile Asp Phe Glu Lys  
180 185 190  
Ser Lys Val Leu Thr Phe Lys Ala Val Asp Pro Asp Thr Gly Pro Trp  
195 200 205  
Gly Glu Val Lys Tyr Ser Thr Tyr Gly Thr Gly Ala Asp Leu Phe Leu  
210 215 220  
Ile His Pro Ser Thr Gly Leu Ile Tyr Thr Gln Pro Trp Ala Ser Leu  
225 230 235 240  
Asp Ala Glu Ala Thr Ala Arg Tyr Asn Phe Tyr Val Lys Ala Glu Asp  
245 250 255  
Met Glu Gly Lys Tyr Ser Val Ala Glu Val Phe Ile Thr Leu Leu Asp  
260 265 270  
Val Asn Asp His Pro Pro Gln Phe Gly Lys Ser Val Gln Lys Lys Thr  
275 280 285  
Met Val Leu Gly Thr Pro Val Lys Ile Glu Ala Ile Asp Glu Asp Ala  
290 295 300  
Glu Glu Pro Asn Asn Leu Val Asp Tyr Ser Ile Thr His Ala Glu Pro  
305 310 315 320  
Ala Asn Val Phe Asp Ile Asn Ser His Thr Gly Glu Ile Trp Leu Lys  
325 330 335  
Asn Ser Ile Arg Ser Leu Asp Ala Leu His Asn Ile Thr Pro Gly Arg  
340 345 350  
Asp Cys Leu Trp Ser Leu Glu Val Gln Ala Lys Asp Arg Gly Ser Pro  
355 360 365  
Ser Phe Ser Thr Thr Ala Leu Leu Lys Ile Asp Ile Thr Asp Ala Glu

370 375 380  
Thr Leu Ser Arg Ser Pro Met Ala Ala Phe Leu Ile Gln Thr Lys Asp  
385 390 395 400  
Asn Pro Met Lys Ala Val Gly Val Leu Ala Gly Thr Met Ala Thr Val  
405 410 415  
Val Ala Ile Thr Val Leu Ile Ser Thr Ala Thr Phe Trp Arg Asn Lys  
420 425 430  
Lys Ser Asn Met Val Leu Pro Met Arg Arg Val Leu Arg Lys Arg Pro  
435 440 445  
Ser Pro Ala Pro Arg Thr Ile Arg Ile Glu Trp Leu Lys Ser Lys Ser  
450 455 460  
Thr Lys Ala Ala Thr Lys Phe Met Leu Lys Glu Lys Pro Pro Asn Glu  
465 470 475 480  
Asn Cys Asn Asn Asn Ser Pro Glu Ser Ser Leu Leu Pro Arg Ala Pro  
485 490 495  
Ala Leu Pro Pro Pro Pro Ser Val Ala Pro Ser Thr Gly Ala Ala Gln  
500 505 510  
Trp Thr Val Pro Thr Val Ser Gly Ser Leu Thr Pro Gln Pro Thr Gln  
515 520 525  
Pro Pro Pro Lys Pro Lys Thr Met Gly Ser Pro Val Gln Ser Thr Leu  
530 535 540  
Ile Ser Glu Leu Lys Gln Lys Phe Glu Lys Lys Ser Val His Asn Lys  
545 550 555 560  
Ala Tyr Phe

&lt;210&gt; 2545

&lt;211&gt; 214

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2545

```

Met Pro Pro Phe Pro Arg Gly Leu Lys Thr His Tyr Val Asp Leu Val
  1           5           10           15
Pro Gly Ser Val Arg Arg Trp Pro Gln Leu Trp Gly Trp Ser Met Leu
      20           25           30
Pro Thr His Ser Ser Gly Lys Trp Gly Pro Arg His Arg Gly Ser Ala
      35           40           45
Pro Thr Ala Ala Pro Gly Ala Leu Val Phe Trp Glu Gly Leu Gly Val
      50           55           60
Cys Thr Arg Arg Pro Gly Pro Gly Thr Ser Pro Gly Ala Gly Ser Gln
      65           70           75           80
Gly His Arg Val Cys Gly Lys Arg Cys Gly Gly Arg Ala Gly His Arg
      85           90           95
Arg Val Ser Arg Arg Arg Leu Gln Ala Gly Leu Ser Gln Ser Arg Arg
      100           105           110
Arg Gly Ile Pro Ser Arg Thr Gly Val Leu Ser Pro Thr Ala Val Ile
      115           120           125
Ser Ser Arg Ser Gly Arg Gly Ser Lys Gln Asn Arg Leu Arg Glu Ala
      130           135           140
Gly Leu Gly Gln Val Gly Gly Ala Pro Pro Cys Met Thr Ala Thr Val
      145           150           155           160
Gly Ala Phe Arg Arg Leu Thr Ala Val Gly Ala Ser Gly Glu Lys Arg
      165           170           175
Gly Gly Thr Ala Val Ser Ser Cys Gly Ala Ala Ser Asn Trp His Pro
      180           185           190
Gly Thr Gly Pro Val Gln Arg Arg His Leu Gln Arg Ala Gly Gln Pro

```

出証特 2 0 0 4 - 3 0 5 9 6 6 0

Leu Pro Gln Glu Val Glu Glu Ile Val Arg Glu Thr Ile Val Gln Pro  
145 150 155 160  
Lys Ser Glu Phe Leu Glu Phe Ser Ala Gly Leu Glu Lys Leu Leu Lys  
165 170 175  
Glu Glu Thr Glu Thr Phe Pro Ser Lys Tyr Glu Ser Asp Thr Gly Asn  
180 185 190  
Leu Ser Pro Ser Lys Leu Ile Gly Ser Thr Glu Glu Pro Arg Arg Ala  
195 200 205  
Thr Ser Glu Cys His Pro Glu Glu Leu Lys Glu Thr Val Glu Lys Ala  
210 215 220  
Glu Ala Pro Leu Ile Thr Glu Ser Ala Phe Asp Ala Gly Phe Glu Lys  
225 230 235 240  
Leu Leu Lys Glu Ile Thr Glu Ala Pro Pro Tyr Gln Pro Gln Val Ser  
245 250 255  
Val Arg Glu Glu Thr His Glu Lys Glu Ser Ser Gln Ser Glu Gln Thr  
260 265 270  
Arg Phe Leu Gly Thr Val Pro His Phe Tyr Arg Ala Ala Ser Gln Thr  
275 280 285  
Ser Glu Met Lys Asp Lys Ser Asn Gly Leu Glu Ser Gln Val Asn Gln  
290 295 300  
Cys Asp Lys Met Leu Gly Gly Asp Ala Leu Val Thr Asp Leu Leu Val  
305 310 315 320  
Asp Phe Cys Gly Ser Arg Ser Gly Val Glu Ile Pro Arg Thr Pro Gln  
325 330 335  
Leu Tyr Val Ala His Glu Ile Gly Thr Ile Lys Thr Val Thr Pro Pro  
340 345 350  
Glu Asp Arg Asp Ser Glu Ser Gly Val Ala Gly Gly Gln Gly Thr Leu  
355 360 365  
Gln Glu Pro Gly Phe Gly Glu Ala Ser Glu Ala Ile Ser Val Ser Arg

370 375 380  
Asn Arg Gln Pro Ile Pro Leu Leu Met Asn Lys Glu Asn Ser Thr Lys  
385 390 395 400  
Thr Ser Lys Val Glu Leu Thr Leu Ala Ser Pro Tyr Met Lys Gln Glu  
405 410 415  
Lys Glu Glu Glu Lys Glu Gly Phe Ser Glu Ser Asp Phe Ser Asp Gly  
420 425 430  
Asn Thr Ser Ser Asn Ala Glu Ser Trp Arg Asn Pro Ser Ser Ser Glu  
435 440 445  
Glu Glu Pro Ser Pro Val Leu Lys Thr Leu Glu Arg Ser Ala Ala Arg  
450 455 460  
Lys Met Pro Ser Lys Ser Leu Glu Asp Ile Ser Ser Asp Ser Ser Asn  
465 470 475 480  
Gln Ala Lys Val Asp Asn Gln Pro Glu Glu Leu Val Arg Ser Ala Glu  
485 490 495  
Asp Val Ser Thr Val Pro Thr Gln Pro Asp Asn Pro Phe Ser His Pro  
500 505 510  
Asp Lys Leu Lys Arg Met Ser Lys Ser Val Pro Ala Phe Leu Gln Asp  
515 520 525  
Glu Ser Asp Asp Arg Glu Thr Asp Thr Ala Ser Glu Ser Ser Tyr Gln  
530 535 540  
Leu Ser Arg His Lys Lys Ser Pro Ser Ser Leu Thr Asn Leu Ser Ser  
545 550 555 560  
Ser Ser Gly Met Thr Ser Leu Ser Ser Val Ser Gly Ser Val Met Ser  
565 570 575  
Val Tyr Ser Gly Asp Phe Gly Asn Leu Glu Val Lys Gly Asn Ile Gln  
580 585 590  
Phe Ala Ile Glu Tyr Val Glu Ser Leu Lys Glu Leu His Val Phe Val  
595 600 605

Ala Gln Cys Lys Asp Leu Ala Ala Ala Asp Val Lys Lys Gln Arg Ser  
610 615 620  
Asp Pro Tyr Val Lys Ala Tyr Leu Leu Pro Asp Lys Gly Lys Met Gly  
625 630 635 640  
Lys Lys Lys Thr Leu Val Val Lys Lys Thr Leu Asn Pro Val Tyr Asn  
645 650 655  
Glu Ile Leu Arg Tyr Lys Ile Glu Lys Gln Ile Leu Lys Thr Gln Lys  
660 665 670  
Leu Asn Leu Ser Ile Trp His Arg Asp Thr Phe Lys Arg Asn Ser Phe  
675 680 685  
Leu Gly Glu Val Glu Leu Asp Leu Glu Thr Trp Asp Trp Asp Asn Lys  
690 695 700  
Gln Asn Lys Gln Leu Arg Trp Tyr Pro Leu Lys Arg Lys Thr Ala Pro  
705 710 715 720  
Val Ala Leu Glu Ala Glu Asn Arg Gly Glu Met Lys Leu Ala Leu Gln  
725 730 735  
Tyr Val Pro Glu Pro Val Pro Gly Lys Lys Leu Pro Thr Thr Gly Glu  
740 745 750  
Val His Ile Trp Val Lys Glu Cys Leu Asp Leu Pro Leu Leu Arg Gly  
755 760 765  
Ser His Leu Asn Ser Phe Val Lys Cys Thr Ile Leu Pro Asp Thr Ser  
770 775 780  
Arg Lys Ser Arg Gln Lys Thr Arg Ala Val Gly Lys Thr Thr Asn Pro  
785 790 795 800  
Ile Phe Asn His Thr Met Val Tyr Asp Gly Phe Arg Pro Glu Asp Leu  
805 810 815  
Met Glu Ala Cys Val Glu Leu Thr Val Trp Asp His Tyr Lys Leu Thr  
820 825 830  
Asn Gln Phe Leu Gly Gly Leu Arg Ile Gly Phe Gly Thr Gly Lys Ser

|   |     |     |
|---|-----|-----|
| 835   | 840 | 845 |
| Tyr Gly Thr Glu Val Asp Trp Met Asp Ser Thr Ser Glu Glu Val Ala |     |     |
| 850   | 855 | 860 |
| Leu Trp Glu Lys Met Val Asn Ser Pro Asn Thr Trp Ile Glu Ala Thr |     |     |
| 865   | 870 | 875 |
| Leu Pro Leu Arg Met Leu Leu Ile Ala Lys Ile Ser Lys             |     |     |
| 885   | 890 |     |

&lt;210&gt; 2547

&lt;211&gt; 161

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2547

|   |     |     |
|---|-----|-----|
| Met Met Thr Gly Cys Gly Leu Gly Pro Val Val Gly Pro Ser Pro Ala |     |     |
| 1   | 5   | 10  |
| Ser Asp His Ser Ala Leu Leu Pro Leu Gly Cys Lys Cys Ser Cys Arg |     |     |
| 20  | 25  | 30  |
| Leu Ala Cys Ser Cys Leu Leu Ser Leu Pro Gly Pro Leu Gly Leu Leu |     |     |
| 35  | 40  | 45  |
| His Leu Pro Leu Glu Arg Cys Pro Pro Ser Ala Cys Trp Arg Ser Arg |     |     |
| 50  | 55  | 60  |
| His Cys Cys Ser Pro Thr Glu Arg Ser Ser Ser Arg Thr His Leu Gly |     |     |
| 65  | 70  | 75  |
| His Leu Gly Trp Asn Ser Phe Pro Tyr Asp Phe Pro Ser Glu Glu Glu |     |     |
| 85  | 90  | 95  |
| Thr Pro Ser Asp Val Leu Cys Leu Leu Thr Glu Gln Pro Gly Gly Gln |     |     |
| 100   | 105 | 110 |



Ala Ser Leu Gln Phe Leu Leu Gly Ala Pro Glu Ala Met Leu Ser Leu  
 115 120 125  
 Gly Ser Pro Ser Leu Ser Arg Val Ala Val Arg Val Pro Gly Arg Lys  
 130 135 140  
 Arg Pro Gly Arg Leu Glu Arg Ala Gly Val Ala Ser Trp Arg Gln Arg  
 145 150 155 160  
 Val

<210> 2548

<211> 165

<212> PRT

<213> Homo sapiens

<400> 2548

Met Ser His Val Ile Trp Thr Leu Lys Met Glu Cys Ser Glu Thr His  
 1 5 10 15  
 Val Gln Gly Ser Cys Ala Lys Leu Met Ser Arg Thr Gly Leu Leu Met  
 20 25 30  
 Lys Leu Leu Ser Glu Gln Gln Glu Ala Lys Ala Leu Asn Val Glu Trp  
 35 40 45  
 Asp Thr Asp Gln Gln Lys Thr Asn Tyr Ile Asn Glu Asn Met Glu Gln  
 50 55 60  
 Asn Glu Gln Lys Glu Gln Lys Ser Ser Glu Leu Met Lys Glu Val Pro  
 65 70 75 80  
 Gly Tyr Asp Tyr Lys Asn Lys Leu Ile Phe Ala Ile Ser Val Thr Val  
 85 90 95  
 Ile Leu Ile Ile Leu Ile Ile Ile Phe Cys Phe Ile Glu Val Lys Thr

|   |     |     |
|---|-----|-----|
| 100   | 105 | 110 |
| Ile Ile Asn Ser Gly Phe Gln Asn Thr Ile Leu Cys Leu Cys Gly Phe |     |     |
| 115   | 120 | 125 |
| Arg Ile His Lys Leu Lys Thr Asn Val Thr Phe Pro Leu Asp Ile Leu |     |     |
| 130   | 135 | 140 |
| Leu Leu Ser Phe Lys Ala Glu Val Cys Phe Val Leu Leu Leu Gln Cys |     |     |
| 145   | 150 | 155 |
| Ile Phe Gln Asp Cys   |     | 160 |
| 165   |     |     |

&lt;210&gt; 2549

&lt;211&gt; 102

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2549

|   |    |    |
|---|----|----|
| Met Asn Asn Val Ser Leu Asp Ser Leu Tyr Ala Lys Val Phe Ile Leu |    |    |
| 1   | 5  | 10 |
| 15  |    |    |
| Asn Met Cys Pro Lys Ile Tyr Ala Leu Thr Asp Val Ile Lys Ile Val |    |    |
| 20  | 25 | 30 |
| Gln Glu Ile Asn Leu Ser Ile Thr Tyr Phe Val Cys Thr Thr Val Ser |    |    |
| 35  | 40 | 45 |
| Tyr Ser Ala Leu Lys Trp Ser Phe Ile Thr Lys Ala Trp Thr Leu Leu |    |    |
| 50  | 55 | 60 |
| Gln Gln Ser Arg Gly Leu Leu Asn Ser Asp Leu Arg Ser Phe Val Cys |    |    |
| 65  | 70 | 75 |
| 80  |    |    |
| Leu Ser Gln Ile Ile Ala His Ser Gln Gly Asn Lys Glu Ser Trp Trp |    |    |
| 85  | 90 | 95 |

Ile Glu Phe Ser Asp Tyr

100

<210> 2550

<211> 161

<212> PRT

<213> Homo sapiens

<400> 2550

Met Lys Ser Leu Ser Val Ser Ser Asp Phe Leu Gly Lys Asp Lys Pro

1

5

10

15

Val Ser Cys Gly Leu Ala Arg Ser Val Ser Gly Lys Thr Pro Gly Asp

20

25

30

Phe Tyr Asp Arg Arg Thr Thr Lys Pro Glu Phe Leu Arg Pro Gly Pro

35

40

45

Arg Lys Thr Glu Asp Thr Tyr Phe Ile Ser Ser Ala Gly Lys Pro Thr

50

55

60

Pro Gly Thr Gln Gly Lys Ile Lys Leu Val Lys Glu Ser Ser Leu Ser

65

70

75

80

Arg Gln Ser Lys Asp Ser Asn Pro Tyr Ala Thr Leu Pro Arg Ala Ser

85

90

95

Ser Val Ile Ser Thr Ala Glu Gly Thr Thr Arg Arg Thr Ser Ile His

100

105

110

Asp Phe Leu Thr Lys Asp Ser Arg Leu Pro Ile Ser Val Asp Ser Pro

115

120

125

Pro Ala Ala Ala Asp Ser Asn Thr Thr Ala Ala Ser Asn Val Asp Lys

130

135

140

Val Gln Glu Ser Arg Asn Ser Lys Ser Arg Ser Arg Glu Gln Gln Ser

145                      150                      155                      160  
Ser

<210> 2551

<211> 184

<212> PRT

<213> Homo sapiens

<400> 2551

Met Pro Val Lys Gly Ala Ser Ser Leu Leu Phe Leu Pro Leu Pro Pro

1                      5                      10                      15

Ser Ala Trp Gln Leu Cys Leu Leu Ser Lys Arg Arg Val His Pro Ile

20                      25                      30

Arg Thr Pro Leu Pro Phe His Ser Trp Ile Lys Ala Leu Val Ile Ser

35                      40                      45

Asn Gln Lys Val Pro Glu Arg Glu Arg Pro Glu Ser Thr Gly Val Leu

50                      55                      60

Ser Asp Gly Cys Leu Gly Gln Ser Gln Glu Gly Glu Pro Leu Leu Ser

65                      70                      75                      80

Pro Pro Ala Leu Ala His Phe Pro Leu His Ala Arg Cys Cys Gly Ser

85                      90                      95

Ser Trp Ala Trp Pro Gly Ser Ala Gly Glu Ala Ile Arg Met Val Ser

100                      105                      110

Gly Ala Pro Phe Leu Cys Phe Leu Asp Gly Leu Asp Gly Leu Pro Cys

115                      120                      125

Ser Ser Pro Met Ala Ala Leu Pro Ala Pro Met Ala Ala Leu Pro Ala

130                      135                      140

Arg Arg Gln Arg Gln Glu His Ile Glu Gly Gly Ser Gln Gly Cys Gly  
145 150 155 160  
Val Arg Ser Pro Ala Pro Cys Arg Gly Lys Pro Gly Ser Ala Thr Ser  
165 170 175  
Ser Thr Leu Arg Leu Cys Pro Ala  
180

<210> 2552

<211> 151

<212> PRT

<213> Homo sapiens

<400> 2552

Met Ser Ser Ser Thr Ser Phe Ile Leu Ser Ala Ile Ala Ser Gly Phe  
1 5 10 15  
His Tyr Ser Leu Ser Ala Val Thr Ala Cys Gly Gln Leu Leu Leu Leu  
20 25 30  
Thr Ala Cys Arg Glu Leu Pro Asn Phe Ser Ser Gln Phe Phe Leu Arg  
35 40 45  
Ser Trp Leu Phe Trp Pro Gln Leu Lys Gly Val Leu Leu Ser Ser Leu  
50 55 60  
Arg Val Leu Ser Leu Phe Asp Pro Ile Val Val Phe Ser Ser Phe Glu  
65 70 75 80  
His Val Phe Gln Tyr Ser Tyr Phe Asn Leu Leu Arg Thr Leu Lys Gly  
85 90 95  
Asn Asp Lys Leu Val Val Gly Ile Trp Gln Thr Gly Ala Cys Leu Phe  
100 105 110  
Glu Arg Ser Ser Arg Arg Asp Lys Ile Gln Ser Ala Ile Cys Phe Ser

115 120 125  
Trp Arg Gly Lys Arg Glu Asn Leu Leu Asp Tyr Ile Leu Val Pro Trp  
130 135 140  
His Thr Thr Tyr Met Phe Lys  
145 150

&lt;210&gt; 2553

&lt;211&gt; 134

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2553

Met Asn Asn Leu Gly Ser Trp Thr His Cys Phe Thr Thr His Leu Pro  
1 5 10 15  
Leu Asp Glu Val Ile Trp Leu Gln Ile Leu Cys Arg Gly Lys His Leu  
20 25 30  
Leu Met Trp Gln Leu Leu Met Leu Met Val Pro Met Ala Trp Gly Pro  
35 40 45  
Gln Gly Ser Leu Pro Gly Gly Glu Gln Gly Tyr Leu Cys Val Leu Tyr  
50 55 60  
Ser Ser Gln Gly Val Pro Ala Ala Pro Ala Gly Ser Arg Ala Gln Cys  
65 70 75 80  
Thr Val Leu Phe Val Ser Pro Ala Val Leu Ser Ser Pro Gly Tyr Ala  
85 90 95  
Gln Ala Ser Arg Val Phe His Gly Ser Gly Ser Gly Trp Leu Lys Cys  
100 105 110  
Gln Pro Thr Cys Cys Pro Pro Asn Ile Pro Phe Tyr Pro Trp His Ala  
115 120 125

Val Ala Glu Leu Asn Phe

130

<210> 2554

<211> 132

<212> PRT

<213> Homo sapiens

<400> 2554

Met Ile Gln Phe Ser Lys Phe Glu Leu Leu Met Met His Lys Met Val

1

5

10

15

Ser Lys Ile Phe Thr Lys Ser Val Thr Leu Phe Phe Leu Ile Thr Phe

20

25

30

Phe Ser Arg Arg Ser Phe Thr Leu Phe Ala Gln Ala Gly Val Gln Trp

35

40

45

Arg His Leu Gly Ser Leu Gln Leu Leu Pro Pro Gly Phe Lys Arg Phe

50

55

60

Ser Cys Leu Ser Leu Pro Ser Ser Trp Asp Tyr Arg Ser Leu Leu Pro

65

70

75

80

Cys Leu Ala Asn Phe Val Phe Leu Val Gly Met Gly Phe His His Gly

85

90

95

Gly Gln Ala Gly Leu Asp Leu Leu Thr Ser Ser Asn Pro Pro Thr Ser

100

105

110

Ala Ser Gln Ser Ala Met Ile Ile Gly Val Ser His His Ala Trp Pro

115

120

125

Ile Thr Leu Tyr

130

&lt;210&gt; 2555

&lt;211&gt; 173

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2555

Met Pro Pro His Thr Leu Pro Arg Ala Arg Leu Pro Gln Arg Pro Thr

1 5 10 15

Trp Pro His Met Gln Pro Tyr Gln Leu Pro Arg Ala Ala His Val Pro

20 25 30

Trp Val Thr Val Gly Val Ser Gly Arg Pro Pro Thr His Gly Cys Thr

35 40 45

Ala Arg Thr Ser Pro Ser Thr Trp Gly Arg Ala Ser Ser Pro Ser Phe

50 55 60

Lys Asn Arg Lys His Ile Ser Trp Gln Lys Gly Arg Arg Trp Gly Ala

65 70 75 80

Val Arg Leu Ser Ser Val Tyr Gly Glu Glu Val His Trp Pro Arg Leu

85 90 95

Ala Ser Val Pro Ala Leu Pro Leu Ile Gly Ser Phe Leu Thr Leu Val

100 105 110

Ser Leu Lys Val Thr Leu Ala Leu Glu Gly Cys Arg Gly Ala Glu Met

115 120 125

Gly Arg Cys Val Trp Lys Ser Arg Ala Asp Ile Gln Ala Glu Ala Trp

130 135 140

Pro Gly Ser Leu Arg Thr Arg Glu Val Ser Phe Leu Ala Pro Asp Ala

145 150 155 160

Gly Asp Gln Trp Pro Leu Leu Thr Phe Pro Gly Glu Phe

165 170



&lt;210&gt; 2556

&lt;211&gt; 710

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2556

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Met His Asn Ile Arg Gly Asn Lys Gln Ala Gln Gly Thr Gly His Glu
  1             5             10             15
Pro Pro Gly Glu Asp Ser Thr Gln Ser Gly Glu Pro Gln Arg Glu Glu
          20             25             30
Gln Pro Ser Ala Ser Asp Ala Ser Thr Pro Val Arg Glu Pro Glu Asp
          35             40             45
Ser Pro Lys Pro Ala Pro Lys Pro Ser Leu Thr Ile Ser Phe Ala Gln
          50             55             60
Lys Ala Lys Arg Gln Asn Asn Thr Phe Pro Phe Phe Ser Glu Gly Ile
          65             70             75             80
Thr Arg Asn Arg Thr Ala Gln Glu Lys Val Ala Ala Leu Glu Gln Gln
          85             90             95
Val Leu Met Leu Thr Lys Glu Leu Lys Ser Gln Lys Glu Leu Val Lys
          100            105            110
Ile Leu His Lys Ala Leu Glu Ala Ala Gln Gln Glu Lys Arg Ala Ser
          115            120            125
Ser Ala Tyr Leu Ala Ala Ala Glu Asp Lys Asp Arg Leu Glu Leu Val
          130            135            140
Arg His Lys Val Arg Gln Ile Ala Glu Leu Gly Arg Arg Val Glu Ala
          145            150            155            160
Leu Glu Gln Glu Arg Glu Ser Leu Ala His Thr Ala Ser Leu Arg Glu

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|   |     |     |
|---|-----|-----|
| 165   | 170 | 175 |
| Gln Gln Val Gln Glu Leu Gln Gln His Val Gln Leu Leu Met Asp Lys |     |     |
| 180   | 185 | 190 |
| Asn His Ala Lys Gln Gln Val Ile Cys Lys Leu Ser Glu Lys Val Thr |     |     |
| 195   | 200 | 205 |
| Gln Asp Phe Thr His Pro Pro Asp Gln Ser Pro Leu Arg Pro Asp Ala |     |     |
| 210   | 215 | 220 |
| Ala Asn Arg Asp Phe Leu Ser Gln Gln Gly Lys Ile Glu His Leu Lys |     |     |
| 225   | 230 | 235 |
| 240   |     |     |
| Asp Asp Met Glu Ala Tyr Arg Thr Gln Asn Cys Phe Leu Asn Ser Glu |     |     |
| 245   | 250 | 255 |
| Ile His Gln Val Thr Lys Ile Trp Arg Lys Val Ala Glu Lys Glu Lys |     |     |
| 260   | 265 | 270 |
| Ala Leu Leu Thr Lys Cys Ala Tyr Leu Gln Ala Arg Asn Cys Gln Val |     |     |
| 275   | 280 | 285 |
| Glu Ser Lys Tyr Leu Ala Gly Leu Arg Arg Leu Gln Glu Ala Leu Gly |     |     |
| 290   | 295 | 300 |
| Asp Glu Ala Ser Glu Cys Ser Glu Leu Leu Arg Gln Leu Val Gln Glu |     |     |
| 305   | 310 | 315 |
| 320   |     |     |
| Ala Leu Gln Trp Glu Ala Gly Glu Ala Ser Ser Asp Ser Ile Glu Leu |     |     |
| 325   | 330 | 335 |
| Ser Pro Ile Ser Lys Tyr Asp Glu Tyr Gly Phe Leu Thr Val Pro Asp |     |     |
| 340   | 345 | 350 |
| Tyr Glu Val Glu Asp Leu Lys Leu Leu Ala Lys Ile Gln Ala Leu Glu |     |     |
| 355   | 360 | 365 |
| Ser Arg Ser His His Leu Leu Gly Leu Glu Ala Val Asp Arg Pro Leu |     |     |
| 370   | 375 | 380 |
| Arg Glu Arg Trp Ala Ala Leu Gly Asp Leu Val Pro Ser Ala Glu Leu |     |     |
| 385   | 390 | 395 |
| 400   |     |     |

Lys Gln Leu Leu Arg Ala Gly Val Pro Arg Glu His Arg Pro Arg Ala  
 405 410 415  
 Trp Arg Trp Leu Val His Leu Arg Val Gln His Leu His Thr Pro Gly  
 420 425 430  
 Cys Tyr Gln Glu Leu Leu Ser Arg Gly Gln Ala Arg Glu His Pro Ala  
 435 440 445  
 Ala Arg Gln Ile Glu Leu Asp Leu Asn Arg Thr Phe Pro Asn Asn Lys  
 450 455 460  
 His Phe Thr Cys Pro Thr Ser Ser Phe Pro Asp Lys Leu Arg Arg Val  
 465 470 475 480  
 Leu Leu Ala Phe Ser Trp Gln Asn Pro Thr Ile Gly Tyr Cys Gln Gly  
 485 490 495  
 Leu Asn Arg Leu Ala Ala Ile Ala Leu Leu Val Leu Glu Glu Glu Glu  
 500 505 510  
 Ser Ala Phe Trp Cys Leu Val Ala Ile Val Glu Thr Ile Met Pro Ala  
 515 520 525  
 Asp Tyr Tyr Cys Asn Thr Leu Thr Ala Ser Gln Val Asp Gln Arg Val  
 530 535 540  
 Leu Gln Asp Leu Leu Ser Glu Lys Leu Pro Arg Leu Met Ala His Leu  
 545 550 555 560  
 Gly Gln His His Val Asp Leu Ser Leu Val Thr Phe Asn Trp Phe Leu  
 565 570 575  
 Val Val Phe Ala Asp Ser Leu Ile Ser Asn Ile Leu Leu Arg Val Trp  
 580 585 590  
 Asp Ala Phe Leu Tyr Glu Gly Thr Lys Val Val Phe Arg Tyr Ala Leu  
 595 600 605  
 Ala Ile Phe Lys Tyr Asn Glu Lys Glu Ile Leu Arg Leu Gln Asn Gly  
 610 615 620  
 Leu Glu Ile Tyr Gln Tyr Leu Arg Phe Phe Thr Lys Thr Ile Ser Asn

625                      630                      635                      640  
Ser Arg Lys Leu Met Asn Ile Ala Phe Asn Asp Met Asn Pro Phe Arg  
                         645                      650                      655  
Met Lys Gln Leu Arg Gln Leu Arg Met Val His Arg Glu Arg Leu Glu  
                         660                      665                      670  
Ala Glu Leu Arg Glu Leu Glu Gln Leu Lys Ala Glu Tyr Leu Glu Arg  
                         675                      680                      685  
Arg Ala Ser Arg Arg Arg Ala Val Ser Glu Gly Cys Ala Ser Glu Asp  
                         690                      695                      700  
Glu Val Glu Gly Glu Ala  
705                      710

&lt;210&gt; 2557

&lt;211&gt; 841

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2557

Met Asn Leu Leu Tyr Arg Lys Thr Lys Leu Glu Trp Arg Gln His Lys  
1                      5                      10                      15  
Glu Glu Glu Ala Lys Arg Ser Ser Ser Lys Glu Val Ala Pro Ala Gly  
                         20                      25                      30  
Ser Ala Gly Pro Ala Ala Gly Gln Gly Pro Gly Val Arg Val Arg Asp  
                         35                      40                      45  
Ile Ala Ser Leu Arg Arg Ser Leu Arg Met Gly Phe Met Thr Met Pro  
                         50                      55                      60  
Ala Ser Gln Glu His Thr Pro His Pro Cys Arg Ser Ala Met Ala Pro  
65                      70                      75                      80

|   |     |     |     |
|---|-----|-----|-----|
| Arg Ser Leu Ser Cys His Ser Val Gly Ser Met Asp Ser Val Gly Gly |     |     |     |
| 85  | 90  | 95  |     |
| Gly Pro Gly Gly Ala Ser Gly Gly Leu Thr Glu Asp Ser Ser Thr Arg |     |     |     |
| 100   | 105 | 110 |     |
| Arg Pro Pro Ala Lys Pro Arg Arg His Pro Ser Thr Lys Leu Ser Met |     |     |     |
| 115   | 120 | 125 |     |
| Val Gly Pro Gly Ser Gly Ala Glu Thr Pro Pro Ser Lys Lys Ala Gly |     |     |     |
| 130   | 135 | 140 |     |
| Ser Gln Lys Pro Thr Pro Glu Gly Arg Glu Ser Ser Arg Lys Val Pro |     |     |     |
| 145   | 150 | 155 | 160 |
| Pro Gln Lys Pro Arg Arg Ser Pro Asn Thr Gln Leu Ser Val Ser Phe |     |     |     |
| 165   | 170 | 175 |     |
| Asp Glu Ser Cys Pro Pro Gly Pro Ser Pro Arg Gly Gly Asn Leu Pro |     |     |     |
| 180   | 185 | 190 |     |
| Leu Gln Arg Leu Thr Arg Gly Ser Arg Val Ala Gly Asp Pro Asp Val |     |     |     |
| 195   | 200 | 205 |     |
| Gly Ala Gln Glu Glu Pro Val Tyr Ile Glu Met Val Gly Asp Val Phe |     |     |     |
| 210   | 215 | 220 |     |
| Arg Gly Gly Gly Arg Ser Gly Gly Gly Leu Ala Gly Pro Pro Leu Gly |     |     |     |
| 225   | 230 | 235 | 240 |
| Gly Gly Gly Pro Thr Pro Pro Ala Gly Ala Asp Ser Asp Ser Glu Glu |     |     |     |
| 245   | 250 | 255 |     |
| Ser Glu Ala Ile Tyr Glu Glu Met Lys Tyr Pro Leu Pro Glu Glu Ala |     |     |     |
| 260   | 265 | 270 |     |
| Gly Glu Gly Arg Ala Asn Gly Pro Pro Pro Leu Thr Ala Thr Ser Pro |     |     |     |
| 275   | 280 | 285 |     |
| Pro Gln Gln Pro His Ala Leu Pro Pro His Ala His Arg Arg Pro Ala |     |     |     |
| 290   | 295 | 300 |     |
| Ser Ala Leu Pro Ser Arg Arg Asp Gly Thr Pro Thr Lys Thr Thr Pro |     |     |     |

305                      310                      315                      320  
Cys Glu Ile Pro Pro Pro Phe Pro Asn Leu Leu Gln His Arg Pro Pro  
                         325                      330                      335  
Leu Leu Ala Phe Pro Gln Ala Lys Ser Ala Ser Arg Thr Pro Gly Asp  
                         340                      345                      350  
Gly Val Ser Arg Leu Pro Val Leu Cys His Ser Lys Glu Pro Ala Gly  
                         355                      360                      365  
Ser Thr Pro Ala Pro Gln Val Pro Ala Arg Glu Arg Glu Thr Pro Pro  
                         370                      375                      380  
Pro Pro Pro Pro Pro Pro Ala Ala Asn Leu Leu Leu Leu Gly Pro Ser  
385                      390                      395                      400  
Gly Arg Ala Arg Ser His Ser Thr Pro Leu Pro Pro Gln Gly Ser Gly  
                         405                      410                      415  
Gln Pro Arg Gly Glu Arg Glu Leu Pro Asn Ser His Ser Met Ile Cys  
                         420                      425                      430  
Pro Lys Ala Ala Gly Ala Pro Ala Ala Pro Pro Ala Pro Ala Ala Leu  
                         435                      440                      445  
Leu Pro Gly Pro Pro Lys Asp Lys Ala Val Ser Tyr Thr Met Val Tyr  
                         450                      455                      460  
Ser Ala Val Lys Val Thr Thr His Ser Val Leu Pro Ala Gly Pro Pro  
465                      470                      475                      480  
Leu Gly Ala Gly Glu Pro Lys Thr Glu Lys Glu Ile Ser Val Leu His  
                         485                      490                      495  
Gly Met Leu Cys Thr Ser Ser Arg Pro Pro Val Pro Gly Lys Thr Ser  
                         500                      505                      510  
Pro His Gly Gly Ala Met Gly Ala Ala Ala Gly Val Leu His His Arg  
                         515                      520                      525  
Gly Cys Leu Ala Ser Pro His Ser Leu Pro Asp Pro Thr Val Gly Pro  
                         530                      535                      540

Leu Thr Pro Leu Trp Thr Tyr Pro Ala Thr Ala Ala Gly Leu Lys Arg  
545 550 555 560  
Pro Pro Ala Tyr Glu Ser Leu Lys Ala Gly Gly Val Leu Asn Lys Gly  
565 570 575  
Cys Gly Val Gly Ala Pro Ser Pro Met Val Lys Ile Gln Leu Gln Glu  
580 585 590  
Gln Gly Thr Asp Gly Gly Ala Phe Ala Ser Ile Ser Cys Ala His Val  
595 600 605  
Ile Ala Ser Ala Gly Thr Pro Glu Glu Glu Glu Glu Glu Val Gly Ala  
610 615 620  
Ala Thr Phe Gly Ala Gly Trp Ala Leu Gln Arg Lys Val Leu Tyr Gly  
625 630 635 640  
Gly Arg Lys Ala Lys Glu Leu Asp Lys Val Glu Asp Gly Ala Arg Ala  
645 650 655  
Trp Asn Gly Ser Ala Glu Gly Pro Gly Lys Val Glu Arg Glu Asp Arg  
660 665 670  
Gly Pro Gly Thr Ser Gly Ile Pro Val Arg Ser Gln Gly Ala Glu Gly  
675 680 685  
Leu Leu Ala Arg Ile His His Gly Asp Arg Gly Gly Ser Arg Thr Ala  
690 695 700  
Leu Pro Ile Pro Cys Gln Thr Phe Pro Ala Cys His Arg Asn Gly Asp  
705 710 715 720  
Phe Thr Gly Gly Tyr Arg Leu Gly Arg Ser Ala Ser Thr Ser Gly Val  
725 730 735  
Arg Gln Val Val Leu His Thr Pro Arg Pro Cys Ser Gln Pro Arg Asp  
740 745 750  
Ala Leu Ser Gln Pro His Pro Ala Leu Pro Leu Pro Leu Pro Leu Pro  
755 760 765  
Pro Gln Pro Ala Arg Glu Arg Asp Gly Lys Leu Leu Glu Val Ile Glu

770                      775                      780  
 Arg Lys Arg Cys Val Cys Lys Glu Ile Lys Ala Arg His Arg Pro Asp  
 785                      790                      795                      800  
 Arg Gly Leu Cys Lys Gln Glu Ser Met Pro Ile Leu Pro Ser Trp Arg  
                     805                      810                      815  
 Arg Gly Pro Glu Pro Arg Lys Ser Gly Thr Pro Pro Cys Arg Arg Gln  
                     820                      825                      830  
 His Thr Val Leu Trp Asp Thr Ala Ile  
                     835                      840

<210> 2558

<211> 109

<212> PRT

<213> Homo sapiens

<400> 2558

Met Asn Met Leu Val Ile Cys Leu Tyr Leu Val Phe Ile Cys Ile Ala  
 1                      5                      10                      15  
 Ile Phe Glu His Ser Lys Ile Ala Glu His Glu Arg Val Tyr Leu Cys  
                     20                      25                      30  
 Asp Ser Leu Ile Ser Ala Ala Leu Gly Leu Ser Lys Arg Cys Lys Glu  
                     35                      40                      45  
 Arg Asp Ile Cys Ile Thr Ser Thr Ser Ser Thr Ser Thr Thr Thr Ser  
                     50                      55                      60  
 Ser Ser Leu Ala Ser Cys Glu His Arg Gly Thr Cys Pro Ala Leu Val  
 65                      70                      75                      80  
 Ser Gly Cys Glu Trp His Glu Pro Arg Gly Leu Ala Gln Leu His Pro  
                     85                      90                      95



Glu Phe Pro Lys Arg Asn Phe Glu Glu Ser Gln Asn Leu

100

105

<210> 2559

<211> 210

<212> PRT

<213> Homo sapiens

<400> 2559

Met Pro Arg Ser Leu Arg Pro Pro Cys Pro Gly Ser Thr Leu Arg Trp

1

5

10

15

Leu Pro Gly Gly Arg Thr Pro Phe Pro His His Val Ser Cys Gln Pro

20

25

30

Arg Arg Ser Ser Gly Glu Arg Glu Ala Glu Ala Gln Ser Gly Ala Ala

35

40

45

Pro Pro Gly Pro Ser Pro Leu Pro Pro Pro Pro Pro His Pro Ile Pro

50

55

60

Ser Ser Thr Thr Ser Ala Gln Ala Trp Leu Leu Ala Lys Ser Arg His

65

70

75

80

Arg Gly Arg Arg Gly Arg Gly Lys Arg Met Ile Pro Pro Gln Asn Gly

85

90

95

Val Ser Arg Lys Lys Arg Glu Cys Arg Ala Arg Arg Asp Ser Trp Gly

100

105

110

Arg Gly Ala Pro Ala Gly Pro Ala Glu Gly Arg Arg Asn Gly Leu Ser

115

120

125

Glu Gly Gln Ala Glu Gly Arg Thr Pro Thr Val Asp Pro Ser Tyr Ala

130

135

140

Pro Cys Arg Gly Gly Ala Gly Arg Arg Arg Cys Thr Arg Leu Pro Ala

145                      150                      155                      160  
 Ala Cys Gly Arg Arg Ser Pro Arg Ala Arg Gly Ser Arg Lys Pro Arg  
                          165                      170                      175  
 Ser Ser Arg Thr Arg Gly Pro Gly Lys Lys Arg Arg Gly Pro Gln Pro  
                          180                      185                      190  
 Ala Ser Leu Ala Pro Pro Arg Phe Pro Pro Gln Ser Gly Val Pro Leu  
                          195                      200                      205  
 Arg Leu  
                          210

<210> 2560

<211> 163

<212> PRT

<213> Homo sapiens

<400> 2560

Met Pro His Pro Arg Pro Pro Ser Thr Pro Pro Pro Arg Pro Leu Ser  
                          1                      5                      10                      15  
 Thr Pro Cys Pro Gln Leu Pro Leu Leu Ala Pro Val Pro Ala Phe Leu  
                          20                      25                      30  
 Ser His Pro Pro Val Ser Ile Phe Leu Leu Cys Ser His Pro Leu Ser  
                          35                      40                      45  
 Leu Ser Val Ser Leu Leu Phe Leu Phe Ser Val Ser Pro Ser Asp His  
                          50                      55                      60  
 Leu Thr Pro Leu Ala Cys Cys Leu Ala Ser Ser Leu Ser Pro Phe Leu  
                          65                      70                      75                      80  
 Ser Leu Phe Val Ser Ser Leu Phe Leu Thr His Phe Leu Tyr Leu Ala  
                          85                      90                      95

Ala Ser Pro Cys Phe Arg Leu Ser Val Ser Leu Phe Pro Pro Pro Leu  
                   100                  105                  110  
 Ser Leu Pro Arg Ser Pro Ile Ser Val Ser Pro Pro Trp Cys Leu Leu  
                   115                  120                  125  
 Leu Thr Gln Glu Ser Lys Pro Phe Phe Pro Arg Gly Trp Ala Lys Gln  
                   130                  135                  140  
 Pro Gln Pro Gly Pro Phe Ser Ala Thr Arg Phe Leu Thr Trp Gly Pro  
                   145                  150                  155                  160  
 Ser Ala Pro

<210> 2561

<211> 157

<212> PRT

<213> Homo sapiens

<400> 2561

Met Cys Pro Arg Ser Gly Arg Gln Gln Met Glu Lys Leu Cys Val Thr  
           1                  5                  10                  15  
 Val Pro Leu Gly Val Val Gly Arg Phe Phe Ile Lys Phe Thr Glu Gly  
                   20                  25                  30  
 Leu Val Val Pro Gly Val Arg Lys Gly Phe Lys Arg Val Glu Gln Met  
                   35                  40                  45  
 Asp Glu Asp Asn Leu Gln Ile Leu Pro Gln Thr Gln Thr Leu Ala Cys  
           50                  55                  60  
 Val Pro Leu Leu Ser Gly Ile Ser Ser Phe Leu Cys Cys Leu His Arg  
           65                  70                  75                  80  
 Cys Pro Gln Phe Val Tyr Ser Ile Glu Leu Cys Met Leu Gly Ala Pro

|     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
|     | 85  |     | 90  |     | 95  |     |     |     |     |     |     |     |     |     |     |
| Gly | Leu | Ser | Thr | Leu | Asn | Arg | Thr | Ser | Gln | Pro | Ala | Ala | Pro | Val | Gln |
|     | 100 |     |     |     | 105 |     |     |     | 110 |     |     |     |     |     |     |
| His | His | Gly | Ser | Pro | Leu | Gln | Ser | Cys | Asn | Phe | Glu | Ser | Gly | Tyr | Ser |
|     | 115 |     |     |     | 120 |     |     |     | 125 |     |     |     |     |     |     |
| Asp | Val | Thr | Gln | Val | Leu | Gln | Gly | Met | Asn | Thr | Pro | Thr | Leu | Lys | Pro |
|     | 130 |     |     |     | 135 |     |     |     | 140 |     |     |     |     |     |     |
| Leu | Ala | Cys | Arg | Cys | Gly | Arg | Lys | Gly | Ser | Cys | Met | Leu |     |     |     |
| 145 |     |     |     | 150 |     |     |     | 155 |     |     |     |     |     |     |     |

&lt;210&gt; 2562

&lt;211&gt; 132

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2562

|     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| Met | Gln | Val | Ile | His | Gly | Pro | His | Val | Glu | Lys | Leu | Gln | Ser | Pro | Leu |
| 1   |     |     |     | 5   |     |     |     |     | 10  |     |     |     |     | 15  |     |
| Gly | Pro | His | Arg | Pro | Ser | Pro | His | Cys | Pro | Leu | Ser | Val | Val | Thr | Gly |
|     |     |     | 20  |     |     |     |     | 25  |     |     |     |     | 30  |     |     |
| Pro | Asp | Leu | Gln | Glu | Cys | Thr | Phe | His | Ser | Thr | Arg | Lys | Pro | Tyr | Asp |
|     |     | 35  |     |     |     |     | 40  |     |     |     |     | 45  |     |     |     |
| Ile | Leu | Arg | Leu | Pro | Arg | Pro | Ala | Ala | Cys | Met | Gly | Pro | Leu | Pro | Ser |
|     | 50  |     |     |     | 55  |     |     |     |     | 60  |     |     |     |     |     |
| Ser | Thr | Pro | Thr | Leu | Arg | Met | Val | Pro | Cys | Ser | Ala | Leu | Val | Leu | Cys |
|     | 65  |     |     |     | 70  |     |     |     | 75  |     |     |     |     | 80  |     |
| Trp | Pro | Leu | Pro | Ala | Thr | Pro | Thr | Leu | Arg | His | Pro | Gly | Val | Val | Gly |
|     |     |     |     | 85  |     |     |     | 90  |     |     |     |     | 95  |     |     |

Pro Asn Trp Leu Ala Pro Pro Ser Ala Ala Leu Cys Arg Pro Asp Ala  
100 105 110  
Ala Val Trp Pro Asp Leu Pro Ser Ser Asn Ile Leu Leu Val Thr Pro  
115 120 125  
Pro Pro Ala Lys  
130

<210> 2563

<211> 142

<212> PRT

<213> Homo sapiens

<400> 2563

Met Asn Trp Leu Arg Trp Lys Arg Phe Thr Pro Val Ile Met Val His  
1 5 10 15  
Phe Gln Leu His Arg Lys Val Lys Pro Gly Ser Gly Gly Glu Val Asp  
20 25 30  
Ala Ala Gly Ser Gln Gly Cys Ser Phe Arg Ser Gly Leu Pro Pro Ala  
35 40 45  
Trp Thr Gln Trp Phe Ala Ser Ser Ser Ala Thr Ala Pro Gly Asp Ser  
50 55 60  
Ser Pro Pro Leu Ala Ser Gln Pro Ser Ser Ser Gln Val Leu Leu Ser  
65 70 75 80  
Ala Pro Pro Ser Cys Cys Ser Gly Gly Arg Glu Asn His Gln Leu His  
85 90 95  
Thr Leu Leu Val Gly Ser Leu Gln Asp Leu Leu His Thr Glu Leu Ala  
100 105 110  
Ser Ala Tyr Gln Val Glu Ser Phe Val Leu Ile Phe Gln Lys Gln Cys

115 120 125  
Gly Leu Asn Leu Ser Arg Gln Ile Leu His Ala Arg Leu Tyr  
130 135 140

<210> 2564

<211> 218

<212> PRT

<213> Homo sapiens

<400> 2564

Met Arg Thr Ser Ala Gly Gly Leu Val Thr Gly Gly Trp Ile Ala Arg  
1 5 10 15  
Arg Met Ile Ala Arg Arg Met Asp Arg Gln Glu Asp Gly Ser Pro Gly  
20 25 30  
Gly Trp Met Ala Gln Ser Ser Glu Glu Val Val Glu Gly Pro Ala Pro  
35 40 45  
Gly Asp Pro Ala Gly Arg Ser Gln Thr Thr Ser Glu Ala Pro Thr Glu  
50 55 60  
Pro Arg Pro His Gln Ala Glu Gly Leu Ala Pro Ala Glu Glu Glu Gly  
65 70 75 80  
Gly Val Thr Leu Cys Ser Arg Gln Gly Arg Glu Val Glu Ser Ser Gly  
85 90 95  
Phe Ala Ser Ser Cys Ser Cys Pro Gly Leu Pro Lys Gln Met Pro Pro  
100 105 110  
Gln His Thr Asn His Thr Gly Thr Gln Thr His Met His Thr His His  
115 120 125  
Thr Gly Thr His Leu Cys Thr Thr His His Arg His Thr Thr Gln Ala  
130 135 140

His Thr Gln Ala His Thr Cys Thr His His Thr Gly Thr His Arg Gln  
 145                      150                      155                      160  
 Thr Gln Leu His Thr Arg Ser His Thr Asp Thr His Gly His Thr Tyr  
                          165                      170                      175  
 Met Tyr Leu His Ile Tyr Thr His Ala His Lys His His Ser Thr Cys  
                          180                      185                      190  
 Thr Asn Met Gln Tyr Thr Cys Arg His Ile His Ser Asn Gln Met Ile  
                          195                      200                      205  
 Lys Glu Arg Asp Gln Asn Ile Asn Asn Lys  
                          210                      215

<210> 2565

<211> 196

<212> PRT

<213> Homo sapiens

<400> 2565

Met Arg Tyr Thr Thr Val Pro Ser Val Arg Pro Thr Ala Leu Ala Thr  
 1                      5                      10                      15  
 Lys Lys Leu Asp Leu Trp Arg Leu Pro Pro Phe Leu Ile Ile His Leu  
                          20                      25                      30  
 Lys Arg Phe Gln Phe Val Asn Asp Gln Trp Ile Lys Ser Gln Lys Ile  
                          35                      40                      45  
 Val Lys Phe Pro Arg Glu Ser Phe Asp Pro Ser Ala Phe Leu Val Pro  
                          50                      55                      60  
 Arg Asp Pro Ala Leu Cys Gln His Gln Pro Leu Thr Pro Gln Gly Asp  
                          65                      70                      75                      80  
 Glu Leu Ser Lys Pro Arg Ile Leu Ala Arg Glu Val Lys Lys Val Asp

|     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
|     | 85  |     | 90  |     | 95  |     |     |     |     |     |     |     |     |     |     |
| Val | Gln | Ser | Leu | Ala | Gly | Glu | Glu | Asp | Met | Leu | Leu | Ser | Lys | Ser | Pro |
|     | 100 |     |     |     |     |     |     | 105 |     |     |     |     | 110 |     |     |
| Ser | Ser | Leu | Ser | Ala | Asn | Ile | Ser | Ser | Ser | Pro | Lys | Gly | Ser | Pro | Ser |
|     | 115 |     |     |     |     |     |     | 120 |     |     |     |     | 125 |     |     |
| Ser | Pro | Arg | Lys | Ser | Gly | Thr | Ser | Cys | Pro | Ser | Ser | Lys | Asn | Ser | Ser |
|     | 130 |     |     |     |     |     |     | 135 |     |     |     |     | 140 |     |     |
| Pro | Asn | Ser | Cys | Pro | Arg | Thr | Leu | Gly | Arg | Ser | Lys | Gly | Arg | Leu | Arg |
|     | 145 |     |     |     |     |     |     | 150 |     |     |     |     | 155 |     | 160 |
| Leu | Pro | Gln | Ile | Gly | Ser | Lys | Asn | Lys | Leu | Ser | Ser | Ser | Lys | Lys | Asn |
|     |     |     |     |     |     |     |     | 165 |     |     |     |     | 170 |     | 175 |
| Leu | Asp | Ala | Ser | Lys | Glu | Asn | Gly | Ala | Gly | Gln | Ile | Cys | Glu | Leu | Ala |
|     |     |     |     |     |     |     |     | 180 |     |     |     |     | 185 |     | 190 |
| Asp | Ala | Leu | Ser |     |     |     |     |     |     |     |     |     |     |     |     |
|     |     |     |     |     |     |     |     |     |     |     |     |     |     |     | 195 |

&lt;210&gt; 2566

&lt;211&gt; 138

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2566

|     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| Met | Ser | His | Arg | Ala | Gln | Leu | Ile | Phe | Val | Phe | Leu | Phe | Tyr | Leu | Phe |
| 1   |     |     |     | 5   |     |     |     | 10  |     |     |     |     | 15  |     |     |
| Ile | Tyr | Phe | Leu | Gly | Asp | Gly | Val | Leu | Leu | Cys | His | Pro | Gly | Trp | Ser |
|     |     |     | 20  |     |     |     |     | 25  |     |     |     |     | 30  |     |     |
| Thr | Val | Val | Arg | Ser | Trp | Leu | Thr | Ala | Thr | Ser | Ala | Ser | Gln | Val | Ala |
|     |     |     | 35  |     |     |     |     | 40  |     |     |     |     | 45  |     |     |



Gly Ile Thr Gly Met His His His Ala Gln Leu Ile Phe Val Phe Leu  
 50 55 60  
 Val Glu Met Gly Phe His Cys Val Gly Gln Ala Gly Leu Glu Leu Leu  
 65 70 75 80  
 Thr Ser Gly Asp Pro Pro Ala Ser Ala Ser Gln Ser Ala Gly Ile Ile  
 85 90 95  
 Gly Val Ser His Cys Thr Arg Pro Asn Phe Cys Ile Phe Ser Arg Asp  
 100 105 110  
 Gly Val Ser Pro Cys Trp Leu Ser Trp Ser Gly Thr His Gly Leu Lys  
 115 120 125  
 Leu Ser Ala His Leu Ser Leu Pro Lys Cys  
 130 135

&lt;210&gt; 2567

&lt;211&gt; 229

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2567

Met Ala Ala Leu Met Ala Gln Val Glu Tyr Gly Asp Leu Glu Lys Pro  
 1 5 10 15  
 Ala Leu Pro Gly Pro Gly Gly Thr Ser Pro Ala Lys Ala Gln His Leu  
 20 25 30  
 Leu Gln Gln Val Leu Asp Arg Phe His Pro Arg Arg Tyr Arg His Gly  
 35 40 45  
 Ala Pro Ala Glu Gln Leu Arg His Leu Ala Asp Met Leu Thr Thr Lys  
 50 55 60  
 Trp Ala Thr Leu Gln Gly Cys Ser Pro Pro Glu Cys Ile Arg Ile Tyr

65                      70                      75                      80  
Leu Thr Val Ala Arg Lys Trp Pro Phe Phe Gly Ala Lys Leu Phe Ala  
                         85                      90                      95  
Ala Gln Pro Ala Gln Leu Ser Ser Lys Glu Asn Ala Leu Val Trp Ile  
                         100                      105                      110  
Ala Val Asn Glu Asp Gly Val Ser Ile Leu Asp His Asn Thr Met Gln  
                         115                      120                      125  
Val His Ile Thr Tyr Pro Tyr Ser Ser Val Thr Thr Phe Gly Gly Cys  
                         130                      135                      140  
Arg Asp Asp Phe Met Leu Val Ile Arg Ser Ile Pro Asp Lys Ser Ser  
145                      150                      155                      160  
Gly Lys Ser His Ile Glu Lys Leu Ile Phe Arg Met Ala Ala Pro Lys  
                         165                      170                      175  
Ile Ala Glu Ala Thr Phe Ile Met Ala Ser Tyr Met Asn His Cys Thr  
                         180                      185                      190  
Thr Thr Val Asn Pro Pro Thr Asn Pro Pro Gly Ala Cys Gln Leu Trp  
                         195                      200                      205  
Glu Leu Asp Gly Arg Gln Phe Phe Ser Ser Val Ser Cys Ala Thr Lys  
                         210                      215                      220  
Gly Pro Thr Leu Leu  
225

&lt;210&gt; 2568

&lt;211&gt; 152

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2568

Met Ala Ala Glu Asn Glu Ala Ser Gln Glu Ser Ala Leu Gly Ala Tyr  
1 5 10 15  
Ser Pro Val Asp Tyr Met Ser Ile Thr Ser Phe Pro Arg Leu Pro Glu  
20 25 30  
Asp Glu Pro Ala Pro Ala Ala Pro Leu Arg Gly Arg Lys Asp Glu Asp  
35 40 45  
Ala Phe Leu Gly Asp Pro Asp Thr Asp Pro Asp Ser Phe Leu Lys Ser  
50 55 60  
Ala Arg Leu Gln Arg Leu Pro Ser Ser Ser Ser Glu Met Gly Ser Gln  
65 70 75 80  
Asp Gly Ser Pro Leu Arg Glu Thr Arg Lys Asp Pro Phe Ser Ala Ala  
85 90 95  
Ala Ala Glu Cys Ser Cys Arg Gln Asp Gly Leu Thr Val Ile Val Thr  
100 105 110  
Ala Cys Leu Thr Phe Ala Thr Gly Val Thr Val Ala Leu Val Met Gln  
115 120 125  
Ile Tyr Phe Gly Asp Pro Gln Val Arg Gly Thr Asn Gly Glu Gly Glu  
130 135 140  
Glu Thr Gly Glu Trp Gly Val Gly  
145 150

&lt;210&gt; 2569

&lt;211&gt; 186

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2569

Met Cys Ser Gly Lys Glu Asn Pro Asp Ser Asp Ala Asp Leu Asp Val

1 5 10 15  
Asp Gly Asp Asp Thr Leu Glu Tyr Gly Lys Pro Gln Tyr Thr Glu Ala  
20 25 30  
Asp Val Ile Pro Cys Thr Gly Glu Glu Pro Gly Glu Ala Lys Glu Arg  
35 40 45  
Glu Ala Leu Arg Gly Ala Val Leu Asn Gly Gly Pro Pro Ser Thr Arg  
50 55 60  
Ile Thr Pro Glu Phe Ser Lys Trp Val Ser Asp Glu Met Pro Ser Thr  
65 70 75 80  
Ser Asn Gly Glu Ser Ser Lys Gln Glu Ala Met Gln Lys Thr Cys Lys  
85 90 95  
Asn Ser Asp Ile Glu Lys Ile Thr Glu Asp Ser Ala Val Thr Thr Phe  
100 105 110  
Glu Ala Leu Lys Ala Arg Val Arg Glu Leu Glu Arg Gln Leu Ser Arg  
115 120 125  
Gly Asp Arg Tyr Lys Cys Leu Ile Cys Met Asp Ser Tyr Ser Met Pro  
130 135 140  
Leu Thr Ser Ile Gln Cys Trp His Val His Cys Glu Glu Cys Trp Leu  
145 150 155 160  
Arg Thr Leu Val Arg Trp His Gly Gly Arg Gly Met Gly Gly Arg Ser  
165 170 175  
Gly His Cys Pro Asp Val Cys Ala Tyr Ala  
180 185

&lt;210&gt; 2570

&lt;211&gt; 221

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2570

Met Ser Tyr Gly Arg Pro Pro Pro Asp Val Glu Gly Met Thr Ser Leu  
 1 5 10 15  
 Lys Val Asp Asn Leu Thr Tyr Arg Thr Ser Pro Asp Thr Leu Arg Arg  
 20 25 30  
 Val Phe Glu Lys Tyr Gly Arg Val Gly Asp Val Tyr Ile Pro Arg Asp  
 35 40 45  
 Arg Tyr Thr Lys Glu Ser Arg Gly Phe Ala Phe Val Arg Phe His Asp  
 50 55 60  
 Lys Arg Asp Ala Glu Asp Ala Met Asp Ala Met Asp Gly Ala Val Leu  
 65 70 75 80  
 Asp Gly Arg Glu Leu Arg Val Gln Met Ala Arg Tyr Gly Arg Pro Pro  
 85 90 95  
 Asp Ser His His Ser Arg Arg Gly Pro Pro Pro Arg Arg Tyr Gly Gly  
 100 105 110  
 Gly Gly Tyr Gly Arg Arg Ser Arg Ser Pro Arg Arg Arg Arg Ser  
 115 120 125  
 Arg Ser Arg Ser Arg Ser Arg Ser Arg Ser Arg Ser Arg Ser Arg Tyr  
 130 135 140  
 Ser Arg Ser Lys Ser Arg Ser Arg Thr Arg Ser Arg Ser Arg Ser Thr  
 145 150 155 160  
 Ser Lys Ser Arg Ser Ala Arg Arg Ser Lys Ser Lys Ser Ser Ser Val  
 165 170 175  
 Ser Arg Ser Arg Ser Arg Ser Arg Ser Arg Ser Arg Ser Arg Ser Pro  
 180 185 190  
 Pro Pro Val Ser Lys Arg Glu Ser Lys Ser Arg Ser Arg Ser Lys Ser  
 195 200 205  
 Pro Pro Lys Ser Pro Glu Glu Glu Gly Ala Val Ser Ser

210

215

220

&lt;210&gt; 2571

&lt;211&gt; 244

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2571

Met Ala Val Ile Pro Glu Ser Ala Trp Lys His Pro Asp Tyr Val Asp

1

5

10

15

Asp Gly Leu Ser Gly Val Cys Asn Gly Leu Glu Gln Pro Arg Lys Gln

20

25

30

Gln Arg Ser Asp Leu Asn Gly Pro Val Asp Asn Asn Asn Ile Pro Glu

35

40

45

Thr Lys Lys Val Ala Ser Phe Pro Ser Phe Val Ala Val Pro Gly Pro

50

55

60

Cys Glu Pro Glu Asp Leu Ile Asp Gly Ile Ile Phe Ala Ala Asn Tyr

65

70

75

80

Leu Gly Ser Thr Gln Leu Leu Ser Glu Arg Asn Pro Ser Lys Asn Ile

85

90

95

Arg Met Met Gln Ala Gln Glu Ala Val Ser Arg Val Lys Asn Ser Glu

100

105

110

Gly Asp Ala Gln Thr Leu Thr Glu Val Asp Leu Phe Ile Ser Thr Gln

115

120

125

Arg Ile Lys Val Leu Asn Ala Asp Thr Gln Glu Thr Met Met Asp His

130

135

140

Ala Leu Arg Thr Ile Ser Tyr Ile Ala Asp Ile Gly Asn Ile Val Val

145

150

155

160

Leu Met Ala Arg Arg Arg Met Pro Arg Ser Ala Ser Gln Asp Cys Ile  
                     165                    170                    175  
 Glu Thr Thr Pro Gly Ala Gln Glu Gly Lys Lys Gln Tyr Lys Met Ile  
                     180                    185                    190  
 Cys His Val Phe Glu Ser Glu Asp Val Ser Lys Pro Leu Pro Gly His  
                     195                    200                    205  
 Ser Pro Pro Lys Val His Ser Pro Gly Arg Leu Gln Asp Pro Gly Ala  
                     210                    215                    220  
 Val Glu Thr Thr Leu Arg Trp Lys Ala Ser Met Leu Leu Leu Met Phe  
                     225                    230                    235                    240  
 Pro Val Asp Gln

&lt;210&gt; 2572

&lt;211&gt; 195

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2572

Met Met Pro Pro Pro Gly Ile Pro Pro Pro Phe Pro Pro Met Gly Leu  
           1                    5                    10                    15  
 Pro Pro Met Ser Gln Arg Pro Pro Ala Ile Pro Pro Met Pro Pro Gly  
                     20                    25                    30  
 Ile Leu Pro Pro Met Leu Pro Pro Met Gly Ala Pro Pro Pro Leu Thr  
                     35                    40                    45  
 Gln Ile Pro Gly Met Val Pro Pro Met Met Pro Gly Met Leu Met Pro  
                     50                    55                    60  
 Ala Val Pro Val Thr Ala Ala Val Ser Thr Arg Gly Gln Gln Val Ala

65                      70                      75                      80  
 Gly Ser Ala Leu Gln Ser Arg Glu Ser Asp Leu Glu Cys Arg Thr Met  
                             85                      90                      95  
 Thr Ser Ile Leu Ser Leu Phe Ser Ser His Pro Pro Arg Ser Pro Ala  
                             100                      105                      110  
 Ala Leu Pro Thr Leu Lys Ser Phe Ser Pro Ala Met Tyr Ser Ala Leu  
                             115                      120                      125  
 Leu Val Ser His Ser Ser Pro Lys Ala Tyr Thr Phe Ser Cys Tyr Ser  
                             130                      135                      140  
 Arg Ala Leu Ser Ser Ser Leu Lys Glu His Thr Tyr Pro His Arg Ala  
 145                      150                      155                      160  
 Thr His Cys Gly His Met Asn Ile Val Leu His Ile Leu Phe Val Pro  
                             165                      170                      175  
 Arg Arg Val Ser Ser Thr Trp Gly Ser Cys Cys Ala Phe Leu Cys Tyr  
                             180                      185                      190  
 Arg Ser Val  
                             195

<210> 2573

<211> 129

<212> PRT

<213> Homo sapiens

<400> 2573

Met Asp Ile Arg Ser Ala Ala Gly Leu Arg Val Leu Ala Val Asn Ile  
                             1                      5                      10                      15  
 Leu Gly Arg Phe Leu Leu Asn Ser Asp Arg Asn Ile Arg Tyr Val Ala  
                             20                      25                      30



Leu Thr Ser Leu Leu Arg Leu Val Gln Ser Asp His Ser Ala Val Gln  
 35 40 45  
 Arg His Arg Pro Thr Val Val Glu Cys Leu Arg Glu Thr Asp Ala Ser  
 50 55 60  
 Leu Ser Arg Arg Ala Leu Glu Leu Ser Leu Ala Leu Val Asn Ser Phe  
 65 70 75 80  
 Asn Val Arg Ala Met Met Gln Glu Leu Gln Ala Phe Leu Glu Ser Cys  
 85 90 95  
 Pro Pro Asp Leu Arg Ala Asp Cys Ala Ser Gly Ile Leu Leu Ala Ala  
 100 105 110  
 Glu Arg His His Pro Ala Cys Ala Asp Asn Gly Gly His Pro Cys Ala  
 115 120 125  
 Gly

<210> 2574

<211> 192

<212> PRT

<213> Homo sapiens

<400> 2574

Met Glu Asp Ser Ala Val Pro Thr Pro Asp Ser Arg Glu Ala Gly Val  
 1 5 10 15  
 Trp Thr Val Pro His Leu Asn Pro His Ser Leu Cys Leu Pro Leu Pro  
 20 25 30  
 Arg Leu Ala Lys Lys Ser Trp Phe Gly Asn Phe Ile Ser Leu Glu Lys  
 35 40 45  
 Glu Glu Gln Ile Phe Val Val Ile Lys Asp Lys Pro Leu Ser Ser Ile

|   |     |     |     |
|---|-----|-----|-----|
| 50  | 55  | 60  |     |
| Lys Ala Asp Ile Val His Ala Phe Leu Ser Ile Pro Ser Leu Ser His |     |     |     |
| 65  | 70  | 75  | 80  |
| Ser Val Ile Ser Gln Thr Ser Phe Arg Ala Glu Tyr Lys Ala Thr Gly |     |     |     |
| 85  | 90  | 95  |     |
| Gly Pro Ala Val Phe Gln Lys Pro Val Lys Phe Gln Val Asp Ile Thr |     |     |     |
| 100   | 105 | 110 |     |
| Tyr Thr Glu Gly Gly Glu Ala Gln Lys Glu Asn Gly Ile Tyr Ser Val |     |     |     |
| 115   | 120 | 125 |     |
| Thr Phe Thr Leu Leu Ser Gly Pro Ser Arg Arg Phe Lys Arg Val Val |     |     |     |
| 130   | 135 | 140 |     |
| Glu Thr Ile Gln Ala Gln Leu Leu Ser Thr His Asp Pro Pro Ala Ala |     |     |     |
| 145   | 150 | 155 | 160 |
| Gln His Leu Ser Glu Pro Pro Pro Pro Ala Pro Gly Leu Ser Trp Gly |     |     |     |
| 165   | 170 | 175 |     |
| Ala Gly Leu Lys Gly Gln Lys Val Ala Thr Ser Tyr Glu Ser Ser Leu |     |     |     |
| 180   | 185 | 190 |     |

&lt;210&gt; 2575

&lt;211&gt; 256

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2575

|   |    |    |    |
|---|----|----|----|
| Met Asn Pro Gly Gly Arg Ala Cys Ser Glu Pro Arg Leu Arg His Ala |    |    |    |
| 1   | 5  | 10 | 15 |
| Thr Ala Leu Gln Pro Gly Arg Gln Ser Glu Thr Pro Ser Gln Lys Lys |    |    |    |
| 20  | 25 | 30 |    |

出証特 2 0 0 4 - 3 0 5 9 6 6 0

&lt;210&gt; 2576

&lt;211&gt; 101

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2576

Met Gly Trp Val Gly Val Val Gln Val Pro Cys Met Gly Ser Thr Ala

1 5 10 15

Leu Lys Arg Val Gln Arg Pro His Leu Arg Val Ser Ala Arg Ala Gly

20 25 30

Phe Arg Ala Ser Leu Ala Ser Trp Ala Leu Cys Leu Ser His Ser Asp

35 40 45

Ser Asn Met Ile Thr Cys Ser Glu Gln Pro His Leu Ser Lys Gln Gly

50 55 60

Glu Asn Thr Ser Ala Thr Phe Lys Asn Met Ser Pro Gly Ile Lys Lys

65 70 75 80

Lys Thr Arg Lys Ala Ser Phe Ser Ser Leu Val Gly Lys Ser Ser Leu

85 90 95

Leu Thr Ala Ser Ser

100

&lt;210&gt; 2577

&lt;211&gt; 100

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2577

Met Ser His Arg Ala Gln Pro Ile Leu Phe Ser Arg Gln Gly Leu Ala  
 1 5 10 15  
 Leu Ser Pro Glu Leu Glu Cys Ser Gly Ser Ile Met Ala His Tyr Ser  
 20 25 30  
 Leu Asp Leu Leu Gly Ser Gly Ser Ser Pro Thr Ser Ala Ser Arg Val  
 35 40 45  
 Ala Gly Thr Ala Gly Met His Cys His Thr Arg Leu Met Phe Lys Lys  
 50 55 60  
 Phe Phe Cys Arg Asp Arg Val Leu Thr Val Leu Pro Arg Leu Val Leu  
 65 70 75 80  
 Asn Ser Cys Val Gln Ala Val Leu Leu Pro Gln Pro Pro Arg Val Leu  
 85 90 95  
 Gly Leu Gln Ala  
 100

&lt;210&gt; 2578

&lt;211&gt; 239

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2578

Met Arg Trp Ser Leu Thr Leu Ser Pro Arg Leu Glu Cys Ser Gly Ala  
 1 5 10 15  
 Ile Ser Thr Asp Ser Ser Leu His Leu Pro Gly Ser Ser Asn Ser Leu  
 20 25 30  
 Thr Ser Ala Ser Gln Val Gly Gly Ile Thr Gly Ala Cys His His Ala  
 35 40 45  
 Arg Leu Ile Phe Val Phe Ser Val Glu Thr Gly Phe His His Val Gly

出証特 2 0 0 4 - 3 0 5 9 6 6 0

&lt;400&gt; 2579

Met Leu Ser Arg Trp Ser Ala Ser Phe Thr Val Thr Lys Gly Lys Ser  
 1 5 10 15  
 Ser Thr Gln Glu Ala Thr Gly Gln Ala Val Ser Thr Ala His Pro Pro  
 20 25 30  
 Thr Gly Lys Arg Leu Lys Lys Thr Pro Glu Lys Lys Thr Gly Asn Lys  
 35 40 45  
 Asp Cys Lys Ala Asp Ile Ala Phe Leu Ile Asp Gly Ser Phe Asn Ile  
 50 55 60  
 Gly Gln Arg Arg Phe Asn Leu Gln Lys Asn Phe Val Gly Lys Val Ala  
 65 70 75 80  
 Leu Met Leu Gly Ile Gly Thr Glu Gly Pro His Val Gly Leu Val Gln  
 85 90 95  
 Ala Ser Glu His Pro Lys Ile Glu Phe Tyr Leu Lys Asn Phe Thr Ser  
 100 105 110  
 Ala Lys Asp Val Leu Phe Ala Ile Lys Glu Val Gly Phe Arg Gly Gly  
 115 120 125  
 Asn Ser Asn Thr Gly Lys Ala Leu Lys His Thr Ala Gln Lys Phe Phe  
 130 135 140  
 Thr Val Asp Ala Gly Val Arg Lys Gly Ile Pro Lys Val Val Val Val  
 145 150 155 160  
 Phe Ile Asp Gly Trp Pro Ser Asp Asp Ile Glu Glu Ala Gly Ile Val  
 165 170 175  
 Ala Arg Glu Phe Gly Val Asn Val Phe Ile Val Ser Val Ala Lys Pro  
 180 185 190  
 Ile Pro Glu Glu Leu Gly Met Val Gln Asp Val Thr Phe Val Asp Lys  
 195 200 205  
 Ala Val Cys Arg Asn Asn Gly Phe Phe Ser Tyr His Met Pro Asn Trp

210 215 220  
Phe Gly Thr Thr Lys Tyr Glu Ser Leu Trp Tyr Arg Ser Cys Ala Val  
225 230 235 240  
Met Asn Lys

<210> 2580

<211> 100

<212> PRT

<213> Homo sapiens

<400> 2580

Met Val Asn Ile Arg Lys Ala Val Lys Lys Glu Met Glu Arg Ser Val  
1 5 10 15  
Gly Met Val Asn Ser Gln Arg Arg Glu Ala Gly Leu Ala Trp Ser Gln  
20 25 30  
Gln Pro Gly Val Gln His Ser His Ser Pro Gln Lys Glu Gln Lys Ala  
35 40 45  
Thr Cys Ala Leu Phe Cys Arg Cys Ala Phe Pro Thr Pro Pro Trp Gly  
50 55 60  
Pro Leu Ala Gln Phe Ser Leu Ala Val Ser Leu Pro Asp Thr His Phe  
65 70 75 80  
Pro Glu Ala Ser Gln Val Ile Ser His His Met Ser Pro Arg Lys Glu  
85 90 95  
Val Phe Gly Thr  
100



&lt;210&gt; 2581

&lt;211&gt; 169

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2581

Met Gly Thr Ala Tyr Val Ala Leu Pro Gln Pro Ser Ser Met Gln Trp

1 5 10 15

Pro Gly Ser Asn Gln Arg Ser Pro Gly Arg Val Ser Cys Lys Asn Leu

20 25 30

Gly Lys Arg Ala Gln Gly Gly Cys Arg Leu Leu Thr Ala Cys Leu Asp

35 40 45

Arg Pro His Gly Ala Ser Pro His Ile Ala Arg Ala Leu Ala Ser Pro

50 55 60

Leu Pro Thr Cys Lys Arg Gly Cys Trp Gln Gln His Phe Thr Thr Arg

65 70 75 80

Asn Leu Tyr Ser Asn Ser Lys His Ala Leu Thr His Ser Val Asn Tyr

85 90 95

Pro Leu Ser Trp Pro Thr Glu Val Asp Ser Phe Arg Pro Pro Phe Val

100 105 110

Gln Met Arg Lys Leu Arg Leu Thr Pro Lys Pro Gly Gly Phe Gln Met

115 120 125

Trp Ser Gly Ser Leu Cys Pro Gly Asp Glu Gly Thr Arg Arg Val Trp

130 135 140

Ser Arg Ala Gly Val Gly Leu Arg Cys Ser Arg Leu Ala Val Lys Gly

145 150 155 160

Ala Arg Cys Glu Pro Gly Cys Trp Val

165

&lt;210&gt; 2582

&lt;211&gt; 105

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2582

Met Leu Ala Ala Lys Gln Ser Tyr Lys Met Cys Leu Asp Leu Ile Phe

1 5 10 15

Pro Trp Thr Gln Pro Gln Asp Gly Pro Ala Arg Leu Trp Arg Ser Trp

20 25 30

Asp Ser Lys Val Ser Leu Pro Val Cys Ser Gly Ile Gly Ser Trp Ser

35 40 45

Trp Gly Glu Gly Ser Ile Trp Gly Ser Ala Leu Pro Pro Pro Gly Pro

50 55 60

Phe Leu Phe Leu Ile Ser Ser Gln Ser Leu Met Gln Gln Gln Ser Lys

65 70 75 80

Phe Ser Phe Ser Thr Asp Ser Gly Leu Glu Phe Ser Thr Asn Cys Leu

85 90 95

His Leu Pro Gly His Ile Pro Asn Arg

100 105

&lt;210&gt; 2583

&lt;211&gt; 180

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2583

Met Ala Cys Gly Ala Thr Leu Lys Arg Pro Met Glu Phe Glu Ala Ala  
1 5 10 15  
Leu Leu Ser Pro Gly Pro Thr Pro Gly Leu Arg Pro Pro Asp Ala Glu  
20 25 30  
Pro Pro Pro Pro Phe Gln Thr Gln Thr Pro Pro Gln Ser Leu Gln Gln  
35 40 45  
Pro Ala Pro Pro Gly Ser Glu Arg Arg Leu Pro Thr Pro Glu Gln Ile  
50 55 60  
Phe Gln Asn Ile Lys Gln Glu Tyr Ser Arg Tyr Gln Arg Trp Arg His  
65 70 75 80  
Leu Glu Val Val Leu Asn Gln Ser Glu Ala Cys Ala Ser Glu Ser Gln  
85 90 95  
Pro His Ser Ser Ala Leu Thr Ala Pro Ser Ser Pro Gly Ser Ser Trp  
100 105 110  
Met Lys Lys Asp Gln Pro Thr Phe Thr Leu Arg Gln Val Gly Ile Ile  
115 120 125  
Cys Glu Arg Leu Leu Lys Asp Tyr Glu Asp Lys Ile Arg Glu Glu Tyr  
130 135 140  
Glu Gln Ile Leu Asn Thr Lys Leu Ala Glu Gln Tyr Glu Ser Phe Val  
145 150 155 160  
Lys Phe Thr His Asp Gln Ile Met Arg Arg Tyr Gly Thr Arg Pro Thr  
165 170 175  
Ser Tyr Val Ser  
180

&lt;210&gt; 2584

&lt;211&gt; 113

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2584

Met Cys Leu Phe Pro Arg Gln His Leu Asp Leu Ala Ala Trp Ser Gln  
 1 5 10 15  
 Gly Leu Ser Pro Pro Arg Arg Val Pro Ser Ser Gly Val Gly Gly Arg  
 20 25 30  
 Pro Thr Leu Pro Gln Gly Val Pro Phe Asp Gly Lys Cys Ser Gln Gln  
 35 40 45  
 Arg Gly Gly Val Trp Ala Thr Phe Arg Arg Trp Met Trp Trp Pro Arg  
 50 55 60  
 Pro Arg Pro Arg Arg Val Met Ala Phe Pro Phe Cys Arg Cys Gly Gln  
 65 70 75 80  
 Val Gly Leu Gly Pro Val Leu Gly Pro Leu Leu Ala Val Cys Glu Gly  
 85 90 95  
 Pro Gly Gly Arg Arg Gly Pro Asp Ser Ile Pro Ile Lys His Thr Gly  
 100 105 110  
 Thr

&lt;210&gt; 2585

&lt;211&gt; 179

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2585

Met Phe Glu Ser Pro Gly Trp Ala Val Phe Ala Phe Leu Asp Asn Asp  
 1 5 10 15

Cys Gln His Gln Gln Gly Cys Leu Arg Met His Ala Leu Val Leu Gly  
20 25 30  
Pro Glu Ser Gln Arg Glu Leu Pro Leu Leu Ala Arg Ala Gln Ala Ala  
35 40 45  
Val Glu Glu Gln His Pro Gln Gly Ser Val Asp Gly Lys Asp Ala Trp  
50 55 60  
Leu Arg Ala Gly Asp Gly Val Pro Asp Glu Ser Val Pro Pro Thr Val  
65 70 75 80  
Ser Val Phe Arg Thr Cys Glu Val Gln Gly Cys Ala Arg Gly Arg Gly  
85 90 95  
Leu Gly Tyr Ser Asn Leu Ile Arg Gly Pro Glu Glu Arg Trp Val Val  
100 105 110  
Val Ile Asp Ile His Asp Cys Tyr Val Asp Leu Gly Ala Ala Ala Gly  
115 120 125  
Trp Gly Ala Ala Glu Leu Arg Leu His Arg Glu His Asn His Gly Leu  
130 135 140  
Arg Leu Val Ile Gln Gly Leu Pro Gly Ala Asn Ser Ala Gln Pro Arg  
145 150 155 160  
Val Asn Gly Glu Leu Ser Ala Glu Ile Thr Arg Arg Asn Pro Val Lys  
165 170 175  
Asp Trp Phe

&lt;210&gt; 2586

&lt;211&gt; 306

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2586

Met Leu Ala Lys Gln Tyr Gly His Met Lys Ile Val Ala Leu Met Asp  
1 5 10 15  
Thr Tyr Ser Pro Ser Leu Pro Lys Ser Leu Tyr Arg Ser Pro Glu Lys  
20 25 30  
Tyr Glu Asp Leu Ser Ser Ser Asp Glu Ser Cys Pro Ala Pro Gln Arg  
35 40 45  
Gln Arg Pro Cys Arg Lys Lys Gly Val Ser Ile His Glu Gly Pro Arg  
50 55 60  
Ala Leu Ala Arg Ile Thr Gly Ile Gly Leu Gly Gly Arg Ala Pro Arg  
65 70 75 80  
Pro Arg Tyr Glu Gln Ala Pro Pro Arg Gly Tyr Val Thr Phe Asn Ser  
85 90 95  
Ser Gly Glu Asn Pro Leu Glu Glu Glu Gly Leu Cys Cys Arg Asp Val  
100 105 110  
Thr Ser Pro Ile Asn Glu Arg Asp Val Glu Ser Ser Ser Ser Ser Ser  
115 120 125  
Ser Arg Glu Glu His Ala Phe Cys Ala Asn Leu Gly Pro Val Gln Ser  
130 135 140  
Ser Ser Ser Ser Glu Gly Leu Ala Arg Ala Gln Gly Leu Ser Ser Glu  
145 150 155 160  
Ala Ser Val Glu Ser Asn Glu Asp Ser Asp His Ala Cys Lys Ser Ser  
165 170 175  
Ala Arg Lys Gln Ala Lys Ser Tyr Met Lys Thr Lys Asn Pro Asp Ser  
180 185 190  
Gln Trp Pro Pro Arg Ala Ala Thr Asp Arg Glu Gly Phe Leu Ala Glu  
195 200 205  
Ser Ser Pro Gln Thr Gln Arg Ala Pro Tyr Ser Gly Pro Gln Val Arg  
210 215 220

Pro Leu Val Lys Leu Glu Val Thr Leu Arg Asp Gly Thr Phe Cys Asp  
 225                      230                      235                      240  
 Leu Gly Gly Met Cys Cys Val Tyr Asp Val Pro Gly Ala Ala Arg Arg  
                          245                      250                      255  
 Thr Glu Trp Arg Trp His Pro His Gly Leu Leu Gly Ser Thr Gly Ser  
                          260                      265                      270  
 Gln Pro Ala Pro Trp Leu Ala Ala Pro Leu Gln Arg Phe Tyr Ser Val  
                          275                      280                      285  
 Pro Leu His Gly Lys Asp Leu Ser Pro Cys Phe Pro Tyr Trp Ser Trp  
                          290                      295                      300  
 Pro Pro  
 305

<210> 2587

<211> 443

<212> PRT

<213> Homo sapiens

<400> 2587

Met Thr His Thr Leu Pro Ser Ser Tyr His Asn Asp Ala Arg Ser Ser  
   1                      5                      10                      15  
 Leu Ser Val Ser Leu Glu Pro Glu Ser Leu Gly Leu Gly Ser Ala Asn  
                          20                      25                      30  
 Ser Ser Gln Asp Ser Leu His Lys Ala Pro Lys Lys Lys Gly Ile Lys  
                          35                      40                      45  
 Ser Ser Ile Gly Arg Leu Phe Gly Lys Lys Glu Lys Ala Arg Leu Gly  
                          50                      55                      60  
 Gln Leu Arg Gly Phe Met Glu Thr Glu Ala Ala Ala Gln Glu Ser Leu

|   |     |     |     |
|---|-----|-----|-----|
| 65  | 70  | 75  | 80  |
| Gly Leu Gly Lys Leu Gly Thr Gln Ala Glu Lys Asp Arg Arg Leu Lys |     |     |     |
|   | 85  | 90  | 95  |
| Lys Lys His Glu Leu Leu Glu Glu Ala Arg Arg Lys Gly Leu Pro Phe |     |     |     |
|   | 100 | 105 | 110 |
| Ala Gln Trp Asp Gly Pro Thr Val Val Ala Trp Leu Glu Leu Trp Leu |     |     |     |
|   | 115 | 120 | 125 |
| Gly Met Pro Ala Trp Tyr Val Ala Ala Cys Arg Ala Asn Val Lys Ser |     |     |     |
|   | 130 | 135 | 140 |
| Gly Ala Ile Met Ser Ala Leu Ser Asp Thr Glu Ile Gln Arg Glu Ile |     |     |     |
|   | 145 | 150 | 155 |
| Gly Ile Ser Asn Pro Leu His Arg Leu Lys Leu Arg Leu Ala Ile Gln |     |     |     |
|   | 165 | 170 | 175 |
| Glu Met Val Ser Leu Thr Ser Pro Ser Ala Pro Pro Thr Ser Arg Thr |     |     |     |
|   | 180 | 185 | 190 |
| Cys Pro Val Phe Leu Gln Thr Leu Ala Tyr Gly Asp Met Asn His Glu |     |     |     |
|   | 195 | 200 | 205 |
| Trp Ile Gly Asn Glu Trp Leu Pro Ser Leu Gly Leu Pro Gln Tyr Arg |     |     |     |
|   | 210 | 215 | 220 |
| Ser Tyr Phe Met Glu Cys Leu Val Asp Ala Arg Met Leu Asp His Leu |     |     |     |
|   | 225 | 230 | 235 |
| Thr Lys Lys Asp Leu Arg Val His Leu Lys Met Val Asp Ser Phe His |     |     |     |
|   | 245 | 250 | 255 |
| Arg Thr Ser Leu Gln Tyr Gly Ile Met Cys Leu Lys Arg Leu Asn Tyr |     |     |     |
|   | 260 | 265 | 270 |
| Asp Arg Lys Glu Leu Glu Arg Arg Arg Glu Ala Ser Gln His Glu Ile |     |     |     |
|   | 275 | 280 | 285 |
| Lys Asp Val Leu Val Trp Ser Asn Asp Arg Val Ile Arg Trp Ile Gln |     |     |     |
|   | 290 | 295 | 300 |



Ala Ile Gly Leu Arg Glu Tyr Ala Asn Asn Ile Leu Glu Ser Gly Val  
 305                      310                      315                      320  
 His Gly Ser Leu Ile Ala Leu Asp Glu Asn Phe Asp Tyr Ser Ser Leu  
                          325                      330                      335  
 Ala Leu Leu Leu Gln Ile Pro Thr Gln Asn Thr Gln Ala Arg Gln Ile  
                          340                      345                      350  
 Leu Glu Arg Glu Tyr Asn Asn Leu Leu Ala Leu Gly Thr Glu Arg Arg  
                          355                      360                      365  
 Leu Asp Glu Ser Asp Asp Lys Asn Phe Arg Arg Gly Ser Thr Trp Arg  
                          370                      375                      380  
 Arg Gln Phe Pro Pro Arg Glu Val His Gly Ile Ser Met Met Pro Gly  
 385                      390                      395                      400  
 Ser Ser Glu Thr Leu Pro Ala Gly Phe Arg Leu Thr Thr Thr Ser Gly  
                          405                      410                      415  
 Gln Ser Arg Lys Met Thr Thr Asp Val Ala Ser Ser Arg Leu Gln Arg  
                          420                      425                      430  
 Leu Asp Asn Ser Thr Val Arg Thr Tyr Ser Cys  
                          435                      440

<210> 2588

<211> 183

<212> PRT

<213> Homo sapiens

<400> 2588

Met Arg Glu Tyr Lys Val Val Val Leu Gly Ser Gly Gly Val Gly Lys  
     1                      5                      10                      15  
 Ser Ala Leu Thr Val Gln Phe Val Thr Gly Thr Phe Ile Glu Lys Tyr

20 25 30  
Asp Pro Thr Ile Glu Asp Phe Tyr Arg Lys Glu Ile Glu Val Asp Ser  
35 40 45  
Ser Pro Ser Val Leu Glu Ile Leu Asp Thr Ala Gly Thr Glu Gln Phe  
50 55 60  
Ala Ser Met Arg Asp Leu Tyr Ile Lys Asn Gly Gln Gly Phe Ile Leu  
65 70 75 80  
Val Tyr Ser Leu Val Asn Gln Gln Ser Phe Gln Asp Ile Lys Pro Met  
85 90 95  
Arg Asp Gln Ile Val Arg Val Lys Arg Tyr Glu Lys Val Pro Leu Ile  
100 105 110  
Leu Val Gly Asn Lys Val Asp Leu Glu Pro Glu Arg Glu Val Met Ser  
115 120 125  
Ser Glu Gly Arg Ala Leu Ala Gln Glu Trp Gly Cys Pro Phe Met Glu  
130 135 140  
Thr Ser Ala Lys Ser Lys Ser Met Val Asp Glu Leu Phe Ala Glu Ile  
145 150 155 160  
Val Arg Gln Met Asn Tyr Ser Ser Leu Pro Glu Lys Gln Asp Gln Cys  
165 170 175  
Cys Thr Thr Cys Val Val Gln  
180

&lt;210&gt; 2589

&lt;211&gt; 114

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2589

Met Ala Ala His Pro Arg Arg Cys Pro Asp Asn Thr Cys Val Pro Cys  
 1 5 10 15  
 Ile Gly Ser Leu Met Gly Leu Gly Asp Ile Ile Ser Gln Gln Leu Val  
 20 25 30  
 Glu Arg Arg Gly Leu Gln Glu His Gln Arg Gly Arg Thr Leu Thr Met  
 35 40 45  
 Val Ser Leu Gly Cys Gly Phe Val Val Ser Ser Pro Leu Asn Arg Ala  
 50 55 60  
 Ser Val Asp Ser Thr Val Val Leu Val Leu Cys His Pro Leu Ala Ser  
 65 70 75 80  
 Leu Gly Leu Ser His Leu Ser Gln Pro Ala Ala Leu Phe Phe Leu Ser  
 85 90 95  
 Val His Phe Pro Tyr Ser Asp Thr Trp Gly Arg Glu Leu Ser Glu Val  
 100 105 110  
 Glu Ala

<210> 2590

<211> 101

<212> PRT

<213> Homo sapiens

<400> 2590

Met Pro Phe Ser Cys Asn Val Leu His Val His Val Lys Ser Ser Pro  
 1 5 10 15  
 Ser Arg Pro Cys Leu Ala Leu Thr Leu Ile Pro Phe Glu Gly His Leu  
 20 25 30  
 Leu Trp Thr Val Val Leu Cys Asn Leu Gln Ile Ser His Thr Leu Gln

35                      40                      45  
 Gln Met Gln Ile His Ile Glu Ile Ser Gly Ser Ile Cys Gly Leu Glu  
 50                      55                      60  
 Thr His Gly Ala Ile Phe Ile Phe Arg Ser Thr Ala Arg Phe Trp His  
 65                      70                      75                      80  
 Pro Ala Val Gly Cys Gly Ala Pro His Ala Arg Thr Phe Leu Phe Phe  
 85                      90                      95  
 Leu Lys Asn Ser Ser  
 100

<210> 2591

<211> 174

<212> PRT

<213> Homo sapiens

<400> 2591

Met Arg Pro Ser Pro Val Gly Leu Arg Asp Arg Lys His Met Leu Gly  
 1                      5                      10                      15  
 Gln Gly Tyr Thr His Thr His Thr His Thr His Thr His Thr His Ser  
 20                      25                      30  
 Gly Ala Gly Met Asp Met Asn Asn Asn Leu Ser Pro Asn Cys Trp Leu  
 35                      40                      45  
 Glu Gln Asp Val Gly Cys Lys His Arg Gln Ala Ser Asn Thr Pro Pro  
 50                      55                      60  
 Leu Gly Leu Arg Cys Pro His Ala Val Thr Gln Pro Ala Leu His Thr  
 65                      70                      75                      80  
 Cys Val Ser Gln Leu His Thr Leu Pro Gly Cys Thr Arg Thr Ser Arg  
 85                      90                      95

Ala Gly Arg Ser His Pro His Pro Thr Leu Gln Asn Pro Leu Pro Gln  
                     100                    105                    110  
 Pro His Ser Leu Pro Leu Gly Leu Ala Cys Leu Gly Ser Leu Gly Leu  
                     115                    120                    125  
 Ala Thr Pro Ala Pro Lys Ile Gly Gly Pro Ala Arg Pro Gly Val Arg  
                     130                    135                    140  
 Pro Gly Gly Lys Glu Trp Gly Thr Leu Thr Pro Ile Gly Leu Ser Pro  
                     145                    150                    155                    160  
 Ala Glu Arg Arg Pro Pro Asn Val Leu Leu Cys Pro Gly Gly  
                     165                    170

<210> 2592

<211> 180

<212> PRT

<213> Homo sapiens

<400> 2592

Met Tyr Thr His Ile His Met Cys Ile Cys Met Tyr Thr His Met His  
                     1                    5                    10                    15  
 Met Cys Thr Tyr Val Cys Ile His Ile His Ile Cys Val His Ile Tyr  
                     20                    25                    30  
 Ile Cys Met Tyr Thr His Arg Tyr Met Cys Thr Arg Lys His Met Tyr  
                     35                    40                    45  
 Thr His Lys His Met Tyr Val Tyr Thr Tyr Ile Tyr Val Tyr Thr Tyr  
                     50                    55                    60  
 Thr Tyr Val Cys Val His Ile His Ile Cys Val His Ile Tyr Leu Cys  
                     65                    70                    75                    80  
 Met Tyr Thr His Thr Tyr Met Cys Ala His Ile His Met Cys Val Tyr

|   |     |     |     |
|---|-----|-----|-----|
|   | 85  | 90  | 95  |
| Thr Tyr Ile Tyr Val Tyr Ile Tyr Thr His Ile His Ile Cys Val His |     |     |     |
| 100   | 105 | 110 |     |
| Ile Asn Met Tyr Val Ser Ile Tyr Val Tyr Ile Tyr Thr Cys Ile Gln |     |     |     |
| 115   | 120 | 125 |     |
| Ile Tyr Ile Tyr Met Tyr Thr Leu Tyr Val Cys Thr Tyr Thr Tyr Met |     |     |     |
| 130   | 135 | 140 |     |
| Cys Thr Tyr Ile His Ile Cys Ile His Thr Ser Ile Ile Tyr Val Cys |     |     |     |
| 145   | 150 | 155 | 160 |
| Val Tyr Ile His Ile Gln Cys Pro Leu Asn Ile Tyr Ile Tyr Leu Val |     |     |     |
| 165   | 170 | 175 |     |
| Cys Met Cys Val   |     |     |     |
| 180   |     |     |     |

&lt;210&gt; 2593

&lt;211&gt; 108

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2593

|   |    |    |    |
|---|----|----|----|
| Met Leu Val Phe Ala Leu Pro Pro Cys Pro Ser His Cys Tyr Ser Gly |    |    |    |
| 1   | 5  | 10 | 15 |
| Gln Phe Val Ala Leu Trp Leu Leu Met Ala Leu Cys Leu Val Ile Met |    |    |    |
| 20  | 25 | 30 |    |
| Gln Gly Ala Gln Gly Asn Lys Phe Ser Val Asp Ile Leu Lys Thr Asp |    |    |    |
| 35  | 40 | 45 |    |
| Ser Leu Thr Gly Val Leu Glu Leu Glu Lys Glu Thr Ala Val Asp Val |    |    |    |
| 50  | 55 | 60 |    |

Trp Cys Gly Pro Ile Leu Arg Ala Leu Ser Val Arg Gln Glu Ser Tyr  
 65                      70                      75                      80  
 Thr Cys Asp Thr Asn Phe Phe Arg Tyr His Cys Ser Ile Asn Ile Gln  
                          85                      90                      95  
 Thr Ser Leu Ser Pro Cys Thr Pro Thr Ser Glu Asn  
                          100                      105

<210> 2594

<211> 112

<212> PRT

<213> Homo sapiens

<400> 2594

Met Ile Pro Gly Pro Arg Phe His Arg Ala Glu Thr Ser His Trp Tyr  
 1                      5                      10                      15  
 Cys Ser Val Val Cys His Ala Lys Pro Leu Thr Tyr Arg Leu His Glu  
                          20                      25                      30  
 His Gly Leu Phe Met Gln Leu Ser Phe Arg Val Ile Tyr Cys Ala Asp  
                          35                      40                      45  
 Ile Ile Thr Arg Thr Thr Leu Gln Phe Pro Ser Tyr Val Leu Leu Ser  
                          50                      55                      60  
 Tyr Ile Leu Ser Val Leu Cys Val Leu Ile Leu Leu Ser Cys Thr Leu  
 65                      70                      75                      80  
 Met Phe Phe Asn Ser Lys Thr Leu Tyr Ser Gln Cys Leu Cys Leu Tyr  
                          85                      90                      95  
 Ile His Ile Tyr Ile Lys Leu Ser Leu Leu Phe Ile Ile Phe Cys Ile  
                          100                      105                      110

&lt;210&gt; 2595

&lt;211&gt; 141

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2595

Met Phe Gly Ser Ser Arg Gly Gly Val Arg Gly Gly Gln Asp Gln Phe

1

5

10

15

Asn Trp Glu Asp Val Lys Thr Asp Lys Gln Arg Glu Asn Tyr Leu Gly

20

25

30

Asn Ser Leu Met Ala Pro Val Gly Arg Trp Gln Lys Gly Arg Asp Leu

35

40

45

Thr Trp Tyr Ala Lys Gly Arg Ala Pro Cys Ala Gly Pro Ser Arg Glu

50

55

60

Glu Glu Leu Ala Ala Val Arg Glu Ala Glu Arg Glu Ala Leu Leu Ala

65

70

75

80

Ala Leu Gly Tyr Lys Asn Val Lys Lys Gln Pro Thr Gly Leu Ser Lys

85

90

95

Glu Asp Phe Ala Glu Val Cys Lys Arg Glu Gly Gly Asp Pro Glu Glu

100

105

110

Lys Gly Val Asp Arg Leu Leu Gly Leu Gly Ser Ala Arg Cys Gly Arg

115

120

125

Val Ser Arg Gly Gly Gln His Trp Ala Arg Leu Leu Gly

130

135

140

&lt;210&gt; 2596

&lt;211&gt; 189



&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2596

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Met His Thr Tyr Ile Tyr Met Cys Val Tyr Pro Tyr Ile Cys Ile Tyr
  1             5             10             15
Met His Val Tyr Pro Cys Ile Cys Ile Tyr Leu His Val Tyr Thr Tyr
             20             25             30
Ile Cys Met Tyr Ile His Ile Tyr Pro Tyr Leu Cys Met Tyr Val His
             35             40             45
Ile Tyr Pro Tyr Ile Cys Thr Cys Ile Tyr Thr His Ile Cys Met Arg
             50             55             60
Val His Val Tyr Ala Tyr Met Tyr Val Arg Thr Tyr Ile His Ile Met
             65             70             75             80
Cys Met His Val Cys Val Tyr Val Cys Val His Ala Cys Met Cys Val
             85             90             95
Cys Thr Cys Ala Tyr Thr His Val Phe Val Cys Val Arg Val Arg Thr
             100            105            110
Cys Val Tyr Met Arg Thr His Thr His Ile Cys Val Tyr Ala Cys Ala
             115            120            125
Cys Ala His Met Cys Val Cys Val Arg Val His Thr Tyr Val Cys Met
             130            135            140
Arg Ala Tyr Ile His Ala Tyr Met Tyr Val Arg Thr Tyr Ile Cys Ile
             145            150            155            160
Phe Met Phe Tyr Val Tyr Val Phe Tyr Met Tyr Ile Tyr Leu His Ile
             165            170            175
Leu His Tyr Phe His Glu Glu Ile Gly Ala Gln Gly Ser
             180            185

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&lt;210&gt; 2597

&lt;211&gt; 258

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2597

Met Trp Arg Tyr Arg Ser Trp Asp Val Pro Gln Ile Pro Ser Glu Ala

1 5 10 15

Pro Gln Thr Gln Lys Ala Ile Thr Lys Ser Gly Leu Gln His Leu Ala

20 25 30

Pro Pro Pro Pro Thr Pro Gly Ala Pro Cys Ser Glu Ser Glu Arg Gln

35 40 45

Ile Arg Ser Thr Val Asp Trp Ser Glu Ser Ala Thr Tyr Gly Glu His

50 55 60

Ile Trp Phe Glu Thr Asn Val Ser Gly Asp Phe Cys Tyr Val Gly Glu

65 70 75 80

Gln Tyr Cys Val Ala Arg Met Leu Val Ser Ala Arg Arg Gly Thr Pro

85 90 95

Pro Pro Ala Gly Gly Ala Ser Ser Arg Ser Pro Ser Gly Asn Val Gly

100 105 110

Leu Ser Pro Leu Pro Gly Thr Pro Ala Val Gly Arg Pro Arg Met Val

115 120 125

Arg Gly Ala Gly Ala Leu Ser Gly Cys Gln Asp Trp Gly Phe Pro Val

130 135 140

His Thr Lys Gly Ser Cys Ala Gly Ala Gly Ser Leu Arg Asp Arg Leu

145 150 155 160

Thr Trp Cys Leu Arg Gly Pro Leu Phe Leu Ser Cys Ser Arg Ser Gln

165 170 175

Cys Leu Glu Glu Ser Ala Gln Pro Ala Arg Leu Trp Cys Thr Arg Pro  
 180 185 190  
 Ala Ser Ser Ser Trp Arg Arg Trp Val Gly Ser Ser Ala Leu Pro Ala  
 195 200 205  
 Pro Ala Leu Trp Val Leu Arg Pro Phe Gln Arg Ala Leu Thr Pro Thr  
 210 215 220  
 Cys Tyr Thr Asn Gly Leu Pro Gly Val Thr Gln His Ser Gly Val Lys  
 225 230 235 240  
 Ser Gln Gly Pro Trp Ser Gln Met Pro Ala Phe Glu Ser Trp Leu Leu  
 245 250 255  
 Thr Asp

<210> 2598

<211> 159

<212> PRT

<213> Homo sapiens

<400> 2598

Met Tyr Lys Glu Arg Asn Lys Tyr Leu Lys Tyr Asn Leu Pro Asp Ser  
 1 5 10 15  
 Gln Ala Ser Lys Met Pro Gly Arg Gly Ser Ala Arg Ala Lys Leu Thr  
 20 25 30  
 His Ser Gly Gln Ser Val Ser Phe Pro Pro His Gly Lys Asp Glu Ile  
 35 40 45  
 Ser Ser Gln Lys Ile Arg Cys Ala Gly Gly Lys Arg Glu Trp Gly Glu  
 50 55 60  
 Gly Glu Gly Gly Lys Lys Arg Val Ala Arg Arg Gln Glu Cys Val Ser

|                     |                     |                     |         |
|---------------------|---------------------|---------------------|---------|
| 65                  | 70                  | 75                  | 80      |
| Val Ser Arg Lys Phe | Ser Gln Met Ile Leu | Ser Arg Leu Thr His | Phe     |
| 85                  | 90                  | 95                  |         |
| Val Thr Leu Ser Leu | Thr Leu Glu Arg Arg | Gly Lys Thr Gln     | Pro Pro |
| 100                 | 105                 | 110                 |         |
| Phe Phe Phe Pro Leu | Ile Ile Pro His Tyr | Leu His Thr Ala     | Leu Glu |
| 115                 | 120                 | 125                 |         |
| Ser Glu Met Ser Thr | Arg Ser Gly Arg Cys | Pro Ala Ala Ala     | Cys His |
| 130                 | 135                 | 140                 |         |
| Arg Cys Gly Pro Phe | Val Thr Cys Lys Val | Cys Cys Phe Cys     | Pro     |
| 145                 | 150                 | 155                 |         |

&lt;210&gt; 2599

&lt;211&gt; 127

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2599

|                     |                 |                 |             |
|---------------------|-----------------|-----------------|-------------|
| Met Glu Ala Gly Pro | His Pro Arg Pro | Gly His Cys Cys | Lys Pro Gly |
| 1                   | 5               | 10              | 15          |
| Gly Arg Leu Asp Met | Asn His Gly Phe | Val His His Ile | Arg Arg Asn |
| 20                  | 25              | 30              |             |
| Gln Ile Ala Arg Asp | Asp Tyr Asp Lys | Lys Val Lys Gln | Ala Ala Lys |
| 35                  | 40              | 45              |             |
| Glu Lys Val Arg Arg | Arg His Thr Pro | Ala Pro Thr Arg | Pro Arg Lys |
| 50                  | 55              | 60              |             |
| Pro Asp Leu Gln Val | Tyr Leu Pro Arg | His Arg Gly Glu | Ala Ala Arg |
| 65                  | 70              | 75              | 80          |

Pro Ala Cys Leu Gln Pro Ala Arg Ser Ser Cys Asn Ala Leu Pro Phe  
                             85                            90                            95  
 Ser Ile Gly Lys Asn His Phe Leu Leu Leu Arg Phe Ser Ser Ser Arg  
                             100                            105                            110  
 Leu Phe Pro Glu Pro Pro Pro Gln Arg Ser Gln Ile Ser Ala Glu  
                             115                            120                            125

<210> 2600

<211> 154

<212> PRT

<213> Homo sapiens

<400> 2600

Met Pro Val Gly Glu Arg Gly Phe Ala Arg Val Tyr Val Phe Phe Lys  
     1                            5                            10                            15  
 Thr Val Asp Leu Tyr Asn Trp Lys Ser His Ser Lys Gly Leu Trp Val  
                             20                            25                            30  
 Ser Pro Arg Glu Phe Val Thr Leu Ile Trp Arg Ile Phe Ser Thr His  
                             35                            40                            45  
 Asn Pro Thr Trp Pro Gly Val Gln Thr Val Thr Ala Thr Leu Leu Thr  
                             50                            55                            60  
 Ala Glu Asp Lys Ser Ala Thr Met Ala Lys Thr Lys Glu Glu Ala Asp  
     65                            70                            75                            80  
 Asn Met Cys Ala Asp Asn Leu Val Thr Trp Pro Val Glu Val Ser Val  
                             85                            90                            95  
 Pro Ile Ala Asn Pro Asn Trp Asp Pro Ser Asp Asn Lys Asn Gln Glu  
                             100                            105                            110  
 Trp Leu His His Tyr Arg Asn Met Leu Leu Arg Gly Met Arg Glu Ala

115 120 125  
Ser Gln Ser Leu Val Asn Trp Gly Asn Leu Arg Glu Ile Glu Gln Gly  
130 135 140  
Pro Asn Glu Asn Pro Ser Ala Phe Leu Asn  
145 150

<210> 2601

<211> 104

<212> PRT

<213> Homo sapiens

<400> 2601

Met Val Ser Phe Ser Thr Gly Pro Ser Arg His Pro Ser Leu Ile Ser  
1 5 10 15  
Ser Asp Ser Asn Asn Leu Lys Leu Asn Asn Val Arg Leu Pro Arg Glu  
20 25 30  
Asn Met Ser Leu Pro Ser Asn Leu Gln Leu Asn Asp Leu Thr Pro Asp  
35 40 45  
Ser Arg Ala Val Lys Pro Ala Asp Arg Gln Met Ala Gln Asn Asn Ser  
50 55 60  
Arg Pro Glu Leu Leu Asp Pro Glu Pro Gly Gly Leu Leu Thr Ser Gln  
65 70 75 80  
Gly Phe Ile Arg Leu Pro Val Leu Gly Tyr Ile Tyr Arg Val Ser Ser  
85 90 95  
Val Ser Ser Asp Glu Ile Trp Leu  
100

&lt;210&gt; 2602

&lt;211&gt; 888

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2602

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Met His Cys Pro Gly Glu Ala Pro Leu Ala Ala Pro Arg Pro Thr Pro
  1           5           10           15
Lys Asp Pro Cys Leu Arg Asn Val Leu Ala Lys Ala Leu Tyr Asp Asn
           20           25           30
Val Ala Glu Ser Pro Asp Glu Leu Ser Phe Arg Lys Gly Asp Ile Met
           35           40           45
Thr Val Leu Glu Gln Asp Thr Gln Gly Leu Asp Gly Trp Trp Leu Cys
           50           55           60
Ser Leu His Gly Arg Gln Gly Ile Val Pro Gly Asn Arg Leu Lys Ile
           65           70           75           80
Leu Val Gly Met Tyr Asp Lys Lys Pro Ala Gly Pro Gly Pro Gly Pro
           85           90           95
Pro Ala Thr Pro Ala Gln Pro Gln Pro Gly Leu His Ala Pro Ala Pro
           100          105          110
Pro Ala Ser Gln Tyr Thr Pro Met Leu Pro Asn Thr Tyr Gln Pro Gln
           115          120          125
Pro Asp Ser Val Tyr Leu Val Pro Thr Pro Ser Lys Ala Gln Gln Gly
           130          135          140
Leu Tyr Gln Val Pro Gly Pro Ser Pro Gln Phe Gln Ser Pro Pro Ala
           145          150          155          160
Lys Gln Thr Ser Thr Phe Ser Lys Gln Thr Pro His His Pro Phe Pro
           165          170          175
Ser Pro Ala Thr Asp Leu Tyr Gln Val Pro Pro Gly Pro Gly Gly Pro

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|   |     |     |
|---|-----|-----|
| 180   | 185 | 190 |
| Ala Gln Asp Ile Tyr Gln Val Pro Pro Ser Ala Gly Met Gly His Asp |     |     |
| 195   | 200 | 205 |
| Ile Tyr Gln Val Pro Pro Ser Met Asp Thr Arg Ser Trp Glu Gly Thr |     |     |
| 210   | 215 | 220 |
| Lys Pro Pro Ala Lys Val Val Val Pro Thr Arg Val Gly Gln Gly Tyr |     |     |
| 225   | 230 | 235 |
| Val Tyr Glu Ala Ala Gln Pro Glu Gln Asp Glu Tyr Asp Ile Pro Arg |     |     |
| 245   | 250 | 255 |
| His Leu Leu Ala Pro Gly Pro Gln Asp Ile Tyr Asp Val Pro Pro Ile |     |     |
| 260   | 265 | 270 |
| Arg Gly Leu Leu Pro Ser Gln Tyr Gly Gln Glu Val Tyr Asp Thr Pro |     |     |
| 275   | 280 | 285 |
| Pro Met Ala Val Lys Gly Pro Asn Gly Arg Asp Pro Leu Leu Glu Val |     |     |
| 290   | 295 | 300 |
| Tyr Asp Val Pro Pro Ser Val Glu Lys Gly Leu Pro Pro Ser Asn His |     |     |
| 305   | 310 | 315 |
| His Ala Val Tyr Asp Val Pro Pro Ser Val Ser Lys Asp Val Pro Asp |     |     |
| 325   | 330 | 335 |
| Gly Pro Leu Leu Arg Glu Glu Thr Tyr Asp Val Pro Pro Ala Phe Ala |     |     |
| 340   | 345 | 350 |
| Lys Ala Lys Pro Phe Asp Pro Ala Arg Thr Pro Leu Val Leu Ala Ala |     |     |
| 355   | 360 | 365 |
| Pro Pro Pro Asp Ser Pro Pro Ala Glu Asp Val Tyr Asp Val Pro Pro |     |     |
| 370   | 375 | 380 |
| Pro Ala Pro Asp Leu Tyr Asp Val Pro Pro Gly Leu Arg Arg Pro Gly |     |     |
| 385   | 390 | 395 |
| Pro Gly Thr Leu Tyr Asp Val Pro Arg Glu Arg Val Leu Pro Pro Glu |     |     |
| 405   | 410 | 415 |



Val Ala Asp Gly Gly Val Val Asp Ser Gly Val Tyr Ala Val Pro Pro  
 420 425 430  
 Pro Ala Glu Arg Glu Ala Pro Ala Glu Gly Lys Arg Leu Ser Ala Ser  
 435 440 445  
 Ser Thr Gly Ser Thr Arg Ser Ser Gln Ser Ala Ser Ser Leu Glu Val  
 450 455 460  
 Ala Gly Pro Gly Arg Glu Pro Leu Glu Leu Glu Val Ala Val Glu Ala  
 465 470 475 480  
 Leu Ala Arg Leu Gln Gln Gly Val Ser Ala Thr Val Ala His Leu Leu  
 485 490 495  
 Asp Leu Ala Gly Ser Ala Gly Ala Thr Gly Ser Trp Arg Ser Pro Ser  
 500 505 510  
 Glu Pro Gln Glu Pro Leu Val Gln Asp Leu Gln Ala Ala Val Ala Ala  
 515 520 525  
 Val Gln Ser Ala Val His Glu Leu Leu Glu Phe Ala Arg Ser Ala Val  
 530 535 540  
 Gly Asn Ala Ala His Thr Ser Asp Arg Ala Leu His Ala Lys Leu Ser  
 545 550 555 560  
 Arg Gln Leu Gln Lys Met Glu Asp Val His Gln Thr Leu Val Ala His  
 565 570 575  
 Gly Gln Ala Leu Asp Ala Gly Arg Gly Gly Ser Gly Ala Thr Leu Glu  
 580 585 590  
 Asp Leu Asp Arg Leu Val Ala Cys Ser Arg Ala Val Pro Glu Asp Ala  
 595 600 605  
 Lys Gln Leu Ala Ser Phe Leu His Gly Asn Ala Ser Leu Leu Phe Arg  
 610 615 620  
 Arg Thr Lys Ala Thr Ala Pro Gly Pro Glu Gly Gly Gly Thr Leu His  
 625 630 635 640  
 Pro Asn Pro Thr Asp Lys Thr Ser Ser Ile Gln Ser Arg Pro Leu Pro

|   |     |     |
|---|-----|-----|
| 645   | 650 | 655 |
| Ser Pro Pro Lys Phe Thr Ser Gln Asp Ser Pro Asp Gly Gln Tyr Glu |     |     |
| 660   | 665 | 670 |
| Asn Ser Glu Gly Gly Trp Met Glu Asp Tyr Asp Tyr Val His Leu Gln |     |     |
| 675   | 680 | 685 |
| Gly Lys Glu Glu Phe Glu Lys Thr Gln Lys Glu Leu Leu Glu Lys Gly |     |     |
| 690   | 695 | 700 |
| Ser Ile Thr Arg Gln Gly Lys Ser Gln Leu Glu Leu Gln Gln Leu Lys |     |     |
| 705   | 710 | 715 |
| Gln Phe Glu Arg Leu Glu Gln Glu Val Ser Arg Leu Ile Asp His Asp |     |     |
| 725   | 730 | 735 |
| Leu Ala Asn Trp Thr Pro Ala Gln Pro Leu Ala Pro Gly Arg Thr Gly |     |     |
| 740   | 745 | 750 |
| Gly Leu Gly Pro Ser Asp Arg Gln Leu Leu Leu Phe Tyr Leu Glu Gln |     |     |
| 755   | 760 | 765 |
| Cys Glu Ala Asn Leu Thr Thr Leu Thr Asn Ala Val Asp Ala Phe Phe |     |     |
| 770   | 775 | 780 |
| Thr Ala Val Ala Thr Asn Gln Pro Pro Lys Ile Phe Val Ala His Ser |     |     |
| 785   | 790 | 795 |
| Lys Phe Val Ile Leu Ser Ala His Lys Leu Val Phe Ile Gly Asp Thr |     |     |
| 805   | 810 | 815 |
| Leu Ser Arg Gln Ala Lys Ala Ala Asp Val Arg Ser Gln Val Thr His |     |     |
| 820   | 825 | 830 |
| Tyr Ser Asn Leu Leu Cys Asp Leu Leu Arg Gly Ile Val Ala Thr Thr |     |     |
| 835   | 840 | 845 |
| Lys Ala Ala Ala Leu Gln Tyr Pro Ser Pro Ser Ala Ala Gln Asp Met |     |     |
| 850   | 855 | 860 |
| Val Glu Arg Val Lys Glu Leu Gly His Ser Thr Gln Gln Phe Arg Arg |     |     |
| 865   | 870 | 875 |
|   |     | 880 |

Val Leu Gly Gln Leu Ala Ala Ala

885

<210> 2603

<211> 136

<212> PRT

<213> Homo sapiens

<400> 2603

Met Pro Gly Gly Gly Asn Leu Arg Ser Gly Lys Asn Phe Val Leu Phe

1

5

10

15

Pro Glu Lys Lys Lys Lys Lys Lys Lys Asp His Arg Val Arg Arg Asn

20

25

30

Phe Phe Phe Leu Arg Trp Arg Leu Leu Ser Pro Arg Leu Glu Cys Ser

35

40

45

Gly Ala Ile Ser Ala His Cys Asn Phe Cys Leu Pro Gly Ser Ser Asn

50

55

60

Ser Pro Ala Ser Ala Ser Arg Ile Ala Gly Ile Thr Gly Ala His His

65

70

75

80

His Ala Trp Leu Ile Phe Val Phe Leu Val Asp Thr Gly Phe His Gln

85

90

95

Val Gly Gln Thr Cys Leu Lys Leu Leu Thr Ser Ser Asp Leu Pro Ala

100

105

110

Ser Ala Ser Gln Ser Ala Gly Ile Thr Gly Met Ser His Tyr Ala Arg

115

120

125

Arg Glu Arg Asp Ile Asn Leu Lys

130

135

&lt;210&gt; 2604

&lt;211&gt; 104

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2604

Met Val Ser Thr Trp Arg Pro Lys Glu Ala Ala Ser Arg Ala Arg Asp

1 5 10 15

Ile Ala Thr Glu Val Ser Pro Trp Leu Ala Ala Ser Ala Ser Ala Ser

20 25 30

Ala Pro Ser Trp Met Glu Asp Glu Gly Ser Asn Ser Gly Lys Gln Arg

35 40 45

Pro Arg Glu Ala Ala Asp Phe Ser Ile Pro Pro Ser Gly Phe Arg Leu

50 55 60

Gly Arg Cys Thr Ala Val Arg Gly Arg Ala His Val Gly Ser Gln Cys

65 70 75 80

Val Gln Glu Cys Val Tyr Leu Glu Glu Cys Val Cys Glu Cys Val Pro

85 90 95

Gly Pro Val Leu Val Cys Arg Cys

100

&lt;210&gt; 2605

&lt;211&gt; 164

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2605

Met Glu Arg Ile Leu Pro Gln Leu Pro Ser Arg Gly His Lys Ser Ser  
 1 5 10 15  
 Glu Leu His Ser Leu Glu Ser Arg Pro Thr Gly Leu His Thr His Val  
 20 25 30  
 Pro Glu Ile Ser Leu Val Pro Pro Thr Pro Ser Gly Asn Gln Thr Ser  
 35 40 45  
 Ala His Arg Arg Asp Val Ile Leu Arg Val Gln Pro Pro Thr Ser Thr  
 50 55 60  
 Gly Pro Pro Leu Pro Pro Leu Ser Leu Val Asn Arg Ala Ile Pro Cys  
 65 70 75 80  
 Leu Arg Pro Gly Pro Val Asp Ser Asp Leu Thr Ala Asn Met Gly Gln  
 85 90 95  
 Gln Ser Gly Thr Ser Val Tyr Arg Ala Ser Ser Pro Arg Ser Ser Ala  
 100 105 110  
 Cys Gln Lys Glu Gly Asp Gln Pro Pro Gly Gly Ala Gln Ser Ser Ala  
 115 120 125  
 Gly Leu Gly Leu Val Arg Arg Glu Asn Arg Val Ser Arg Gly Trp Val  
 130 135 140  
 Ser Lys Ser Glu His Ser Thr Ser Gly Gln Gly Thr Ser Ala Asp Thr  
 145 150 155 160  
 His Arg Ser Arg

&lt;210&gt; 2606

&lt;211&gt; 187

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2606

Met Ala Ala Ala Gly Pro Met Thr Gly Ala Ala Ala Ser Arg Ala Ala  
 1 5 10 15  
 Thr Ala Ala His Cys Ser Gly Gly Ser Lys Val Glu Ala Val Arg Gly  
 20 25 30  
 Ala Val Gln Gly Ala Ala Gly Val Lys Pro Pro Val Ala Ala Ala Pro  
 35 40 45  
 Ser Leu Leu Trp Leu Cys Pro Pro Gly Pro Pro Val Leu Leu Asp Pro  
 50 55 60  
 Leu Pro Ser Trp Thr Leu Cys Pro Pro Gly Pro Pro Ser Leu Leu Gly  
 65 70 75 80  
 Pro Pro Gly Pro Pro Ala Leu Leu Asp Pro Leu Ser Ser Trp Thr Pro  
 85 90 95  
 Cys Pro Pro Gly Pro Pro Val Cys Gly Pro Cys Ser Ser Pro Pro Ser  
 100 105 110  
 Pro Thr His Asp Trp Thr Pro Arg Ser Ala Ala Gly Val Trp Ala Leu  
 115 120 125  
 Gly Val Leu Trp Ala Ser Arg Cys Leu Gly Thr Ile Thr Gly Ser Arg  
 130 135 140  
 Ala His Thr Gln Pro Leu Leu Pro Glu His Thr Arg Gly Ser Arg His  
 145 150 155 160  
 Pro Asp Glu Ser Thr Val Pro Ala Met Val Phe Arg Asp Gly Glu Gly  
 165 170 175  
 Ser Leu Ser Ser Ala Gly Thr Leu Gln Pro Gly  
 180 185

&lt;210&gt; 2607

&lt;211&gt; 101

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2607

Met Glu Asp Glu Arg Ile Leu Asp Asn Leu Gly Ala Glu Gly Leu His  
1 5 10 15  
Gly Ser Glu Trp Glu Trp Arg Arg Trp His Phe Gly Gly Trp Val Glu  
20 25 30  
Glu Glu His Arg His Arg Trp Pro Arg Gly Val Trp Ser Thr Asp Lys  
35 40 45  
Ser Pro Gly Gly Val Gln Pro Gln Cys Leu Ser Gln Glu Val Ser Ala  
50 55 60  
Leu Val Ser Gly Thr Gln Ser Ser Leu Arg Asn Gly Leu Gly Asp Lys  
65 70 75 80  
Trp Ser Ala Cys Cys Thr Arg Ala Leu Gly Glu Cys Ala Trp Ser Cys  
85 90 95  
Leu Ser Gly His His  
100

&lt;210&gt; 2608

&lt;211&gt; 101

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2608

Met Ser Leu Leu Lys Ser Tyr Cys Lys Leu Arg Ala Asn Cys Asn Leu  
1 5 10 15  
Leu Phe Leu Phe Val Ala Arg Gly Leu His Arg Ser Leu Asn Ile Cys

<210> 2609

<211> 546

<212> PRT

<213> Homo sapiens

<400> 2609

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|   |     |     |     |
|---|-----|-----|-----|
| Asp Asp Val Lys Glu Lys Lys His Pro Glu Asn Asn Gln Lys Ser Gly |     |     |     |
|   | 85  | 90  | 95  |
| Asn Asn Gln Lys Leu Leu Thr Gly Ala Asn Ser Ser Arg Phe Leu Asp |     |     |     |
|   | 100 | 105 | 110 |
| Gly Asn Ile Pro Ser Gln Ala Asn Val His Cys Ser Ser Val Pro Thr |     |     |     |
|   | 115 | 120 | 125 |
| Gly Asp Gln Ser Leu Ser Tyr Val His Gly Ile Pro Arg Arg Lys Leu |     |     |     |
|   | 130 | 135 | 140 |
| Arg Asp Trp Ser Leu Glu Gln Met Val Arg Gly Ser Ser Asp Gln Pro |     |     |     |
|   | 145 | 150 | 155 |
| Glu Asp Ile Gly Gln Ser Pro Ser Gly Thr Thr Asn Glu Asp Ala Phe |     |     |     |
|   | 165 | 170 | 175 |
| Leu Leu Ala Leu Val Arg Arg Glu Leu Lys Ser Arg Pro Leu Ser Ser |     |     |     |
|   | 180 | 185 | 190 |
| Asn Leu Leu Glu Lys Leu Gln Lys Glu Leu Lys Ile Leu Asp Pro Ile |     |     |     |
|   | 195 | 200 | 205 |
| Ser Ser Gly Phe Leu Leu Gln Ser Gln Leu Ser Arg Leu Phe Leu Lys |     |     |     |
|   | 210 | 215 | 220 |
| His Glu Val Pro Leu Gln Leu Pro Thr Val Lys Ile Leu Cys Gln Arg |     |     |     |
|   | 225 | 230 | 235 |
| Phe Ser Lys Arg Gly Ser Pro Glu Met Val Asn Tyr Glu Lys Leu Leu |     |     |     |
|   | 245 | 250 | 255 |
| Trp Phe Leu Asn Ser Ala Ala Ser Asp Tyr Pro Gln Gln Asn Lys Ala |     |     |     |
|   | 260 | 265 | 270 |
| Ala Ala Asp Leu Arg Lys Thr Glu Ser His Gly Thr His Ser Gln Ser |     |     |     |
|   | 275 | 280 | 285 |
| Thr Pro Pro Gln His Ser Ser Ser Gln Pro Glu Val Asn Arg Ser Leu |     |     |     |
|   | 290 | 295 | 300 |
| Leu Glu Ile Leu Lys Met Ala Leu Arg Thr Thr Asn Gly Arg Leu Asn |     |     |     |